Sexual health education in the schools:

Questions & Answers

Sex Information
and Education
Council of Canada
(SIECCAN)

Sexual health education in the schools: Questions & Answers

A resource with answers to your questions about sexual health education in our schools

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INTRODUCTION

Access to effective, broadly based sexual health education is an important contributing factor to the health and well-being of Canadian youth (Health Canada, 2003; Society of Obstetricians and Gynaecologists of Canada, 2004).

School-based programs are an essential avenue for providing sexual health education to young people. Educators, public health professionals, and others who are committed to providing high quality sexual health education in schools and other community settings are often asked to explain the rationale, philosophy, and content of proposed or existing sexual health education programs.

"Access to effective, broadly based sexual health education is an important contributing factor to the health and well-being of Canadian youth."

This document, prepared by SIECCAN, the Sex Information and Education Council of Canada, is designed to support the provision of high quality sexual health education in Canadian schools. It provides answers to some of the most common questions that parents, communities, educators, program planners, school and health administrators, and governments may have about sexual health education in the schools.

Canada is a pluralistic society in which people with differing philosophical, cultural, and religious values live together in a society structured upon democratic principles. Canadians have diverse values and opinions related to human sexuality.

Philosophically, this document reflects the democratic approach to sexual health education embodied in Health Canada's (2003) *Canadian Guidelines for Sexual Health Education.* The Guidelines are based on the principle that sexual health education should be accessible to all people and that it should be provided in an age appropriate, culturally sensitive manner that is respectful of an individual's right to make informed choices about sexual and reproductive health.

The answers to common questions about sexual health education provided in this document are based upon and informed by the findings of up-to-date and credible scientific research. An evidence-based approach combined with a respect for democratic values offers a strong foundation for the development and implementation of high quality sexual health education programs in our schools (McKay, 1998).

1. Sexual health and Canadian youth: How are we doing?

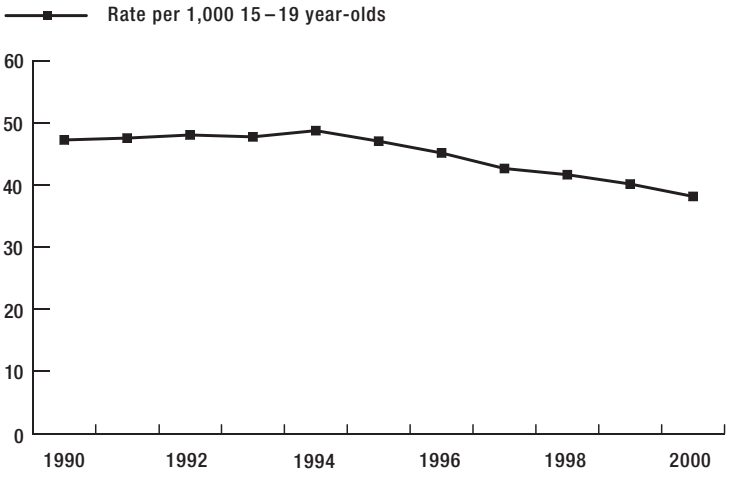
Sexual health is multifaceted and involves the achievement of positive outcomes such as rewarding interpersonal relationships and desired parenthood as well as the avoidance of negative outcomes such as unwanted pregnancy and STI/HIV infection (Health Canada, 2003). Trends in such indicators as pregnancy rates, sexually transmitted infections (STI), age at first intercourse, and contraceptive use, are often used to assess the current status of adolescent sexual health in Canada (Maticka-Tyndale, 2001; SIECCAN, 2004).

With respect to teen pregnancy, it is generally assumed that most teen pregnancies, particularly among younger teens, are unintended (Henshaw, 1998). Teen pregnancy rates are therefore a fairly direct indicator of young women's opportunities and capacity to control this aspect of their sexual and reproductive health. According to data collected by Statistics Canada (Dryburg, 2000; Statistics Canada, 2003), the teen pregnancy rate declined substantially during the last quarter of the twentieth century. More recently, the pregnancy rate among 15- to 19 year-old Canadian females declined from 41.7 per 1,000 in 1998 to 40.2 in 1999 and 38.2 in 2000 (Statistics Canada, 2003). Among younger teen women aged 15 to 17, the pregnancy rate declined from 24.5 per 1,000 in 1998 to 22.7 in 1999 and 21.6 in 2000 (Statistics Canada, 2003).

Sexually transmitted infections (STI) pose a significant threat to the health and well-being of Canadian youth and rates of such infections (e.g., chlamydia, human papillomavirus) are

Figure 1.

Teen Pregnancy Rates Going Down

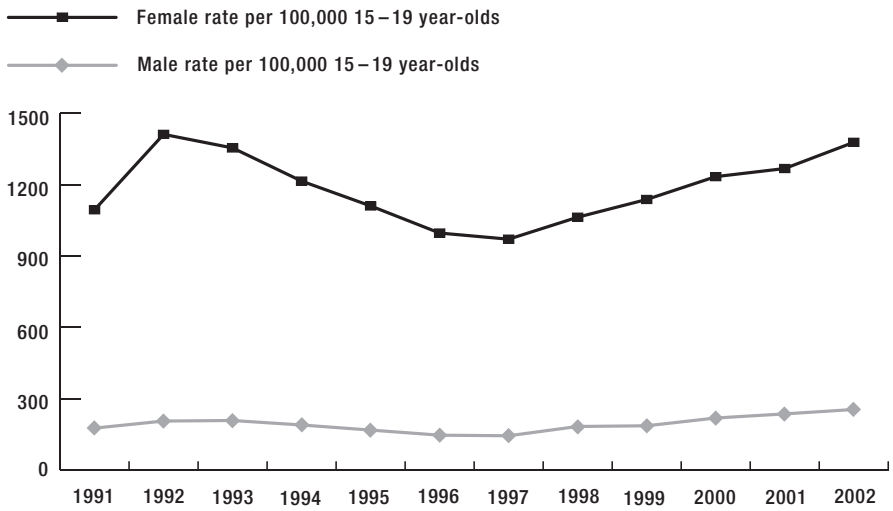


Source: Dryburg (2000); Statistics Canada (2003)

"...the teen pregnancy rate declined substantially over the last quarter of the twentieth century."

Figure 2.

Teen STI (chlamydia) Rates Going Up



Source: Health Canada (2004)

"Sexually transmitted infection rates among Canadian teens are unacceptably high and have been rising in recent years."

highest among teens and young adults. Chlamydia is Canada's most common reportable STI and according to data collected by Health Canada (2004) the chlamydia rate among 15 to 19 year-old females increased from 971.3 per 100,000 in 1997 to 1378.6 in 2002, an increase of 41.9% (For a more complete summary of data on STI among Canadian youth see Health Canada, 2004; SIECCAN, 2004).

According to data from the Canadian Community Health Survey, 2000-2001 (Hansen, et al., 2004), the average of first intercourse was 16.7 years for males and 16.8 years for females. Available data suggest that there has been a long-term trend toward decreasing age of first intercourse (Hansen et al., 2004; Maticka-Tyndale, 2001). However, studies that include data on first intercourse over the past 10-15 years in both Canada (Boyce, Doherty, Fortin & Mackinnon, 2003) and the United States (Centers for Disease Control and Prevention, 2002) indicate that the average age of first intercourse has stabilized in recent years. For example, Boyce et al. (2003) compared data

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on the percentages of Grade 9 (approximately age 14) and Grade 11 (approximately age 16) students in Canadian schools who reported in the years 1988 and 2002 that they had experienced sexual intercourse at least once. For Grade 9 males the percentage who reported intercourse experience declined from 31% in 1988 to 23% in 2002 and for Grade 9 females the percentage declined from 21% to 19%. For Grade 11 students the percentage of males who reported intercourse experience declined from 49% to 40% and for females the percentage remained the same at 46% in both 1988 and 2002.

Data from Boyce et al.'s (2003) study of adolescent sexual behaviour in Canada indicate that about 90% of sexually active Grade 9 and 11 students reported using some form of contraception at last intercourse. However, condom use, which protects against both unintended pregnancy and STI is far from universal among sexually active Canadian teens. In their study, Boyce et al. (2003) found that only 64% of sexually active Grade 11 females used a condom at last intercourse.

Based on their examination of the available data and trends in adolescent sexual health in Canada, Maticka-Tyndale (2001) and SIECCAN (2004) concluded that there is both good news and bad news. On the one hand, teen pregnancy rates in Canada have been declining and the percentage of both younger and older teens who report having had sexual intercourse has not been increasing. In addition, most sexually active teens report using some form of protection at last intercourse. On the other hand, despite declines in the teen pregnancy rate, close to 40,000 teens become pregnant each year and most of these pregnancies are unintended. Sexually transmitted infection rates among Canadian teens are unacceptably high and have been rising in recent years. Together, these data suggest that an increase in coordinated efforts, involving families, schools, health care providers, public health agencies, and communities, to provide sexual health education and related services is needed in order to support the health and well-being of Canadian youth.

2. Why do we need sexual health education in the schools?

Sexual health is an important component of overall health and well-being. It is a major, positive part of personal health and healthy living and it follows that "sexual health education should be available to all Canadians as an important component of health promotion and services" (Health Canada, 2003, p. 1). In principle, all Canadians, including youth, have a right to the information, motivation/personal insight, and skills necessary to prevent negative sexual health outcomes (e.g., sexually transmitted infections including HIV, unplanned pregnancy) and to enhance sexual health (e.g., maintenance of reproductive health, positive self-image).

Most Canadians become sexually active during their teenage years with over 70% of males and females experiencing their first sexual intercourse before age 20 (Maticka-Tyndale, Barrett & McKay, 2001). In order to ensure that youth are equipped with the information, motivation/personal insight, and skills to protect their sexual and reproductive health, "it is imperative that schools, in co-operation with parents, the community, and health-care professionals, play a major role in sexual health education and promotion" (Society of Obstetricians and Gynecologists of Canada, 2004, p. 596).

Parents and guardians are a primary and important source of sexual health education for young people. Adolescents often look to their families as one of several preferred sources of sexual health information (King et al., 1988; McKay & Holowaty, 1997). In addition, most young people agree that sexual health education should be a shared responsibility between parents and schools (Byers, Sears, Voyer, et al., 2003a; Byers, Sears, Voyer, et al., 2003b). A recent study found that among Grade 9 students in Canada, the school was the most frequently cited main source of information on human sexuality/puberty/birth control and HIV/AIDS (Boyce et al., 2003).

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As suggested by Health Canada (2003),

> Since schools are the only formal educational institution to have meaningful contact with nearly every young person, they are in a unique position to provide children, adolescents, and young adults with the knowledge and skills they will need to make and act upon decisions that promote sexual health throughout their lives (p. 17).

As an important part of its contribution to adolescent development, school-based sexual health education can play an important role in the primary prevention of significant sexual health problems. As documented in more detail below, well developed and implemented school-based sexual health education programs can effectively help youth reduce their risk of STI/HIV infection and unintended pregnancy. In addition, it should be emphasized that an important goal of sexual health education is to provide insights into broader aspects of sexuality, including sexual well-being and rewarding interpersonal relationships (Health Canada, 2003).

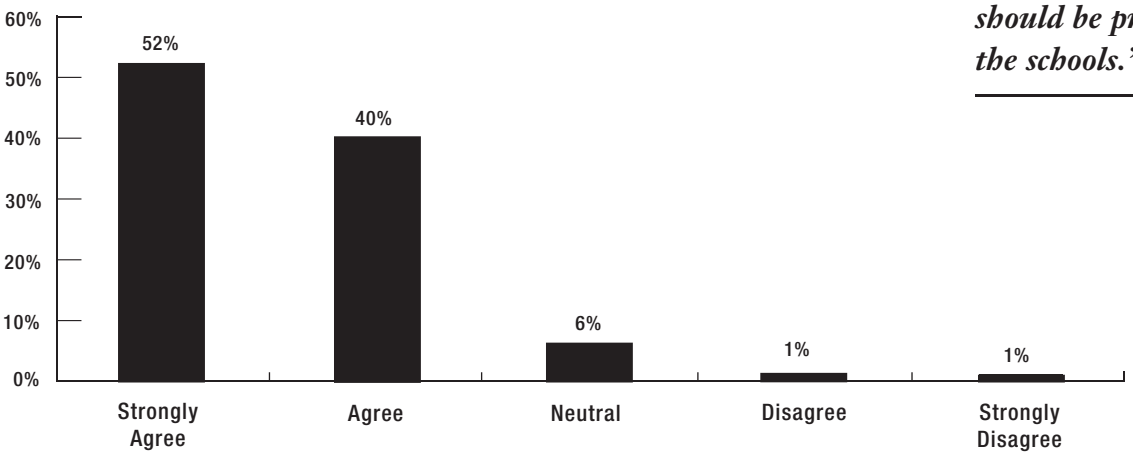
3. Do parents want sexual health education taught in the schools?

Survey research shows that Canadian parents want the schools to provide broadly based sexual health education. A series of surveys of Canadian parents have consistently found that over 85% of parents agreed with the statement "Sexual health education should be provided in the schools" and a majority of these parents approved of schools providing young people with information on a wide range of sexual health topics including puberty, reproduction, healthy relationships, STI/AIDS prevention, birth control, abstinence, sexual orientation, and sexual abuse/coercion (Langille, Langille, Beazley, & Doncaster, 1996; McKay, 1996; McKay, Pietrusiak & Holowaty, 1998; Weaver, Byers, Sears, Cohen, & Randall, 2002).

"A series of surveys of Canadian parents have consistently found that over 85% of parents agreed with the statement 'Sexual health education should be provided in the schools.'"

Figure 3.

Percentage of high school students agreeing with the statement "Sexual health education should be provided in the schools."



Source: Byers et al, (2003a)

4. Do young people want sexual health education taught in the schools?

In addition to parents, Canadian young people are also highly supportive of sexual health education in the schools (Byers, Sears, Voyer, Thurlow, Cohen, & Weaver, 2003a; Byers, Sears, Voyer, Thurlow, Cohen, & Weaver, 2003b; HKPR Health Unit, 1999; McKay & Holowaty, 1997). For example, a recent survey of high school youth found that 92% agreed that "Sexual health education should be provided in the schools" and they rated the following topics as either "very important" or "extremely important": puberty, reproduction, personal safety, sexual coercion & sexual assault, sexual decision-making in dating relationships, birth control methods and safer sex practices, and sexually transmitted diseases (Byers, et al., 2003a).

(See Figure 3 on Page 5)

5. What values are taught in school-based sexual health education?

Canada is a pluralistic society in which different people have different values perspectives towards human sexuality. At the same time, Canadians are united by their respect for basic democratic values. An emphasis on democratic values provides the overall philosophical framework for many school-based sexual health education programs. For example, Health Canada's (2003) *Canadian Guidelines for Sexual Health Education* have been used by a number of communities as a basis for the development of a consensus on the basic values that should be reflected in school-based sexual health education. The Guidelines were formulated to embody an educational philosophy that is inclusive, respects diversity, and reflects the fundamental precepts of education in a democratic society. Thus, the *Canadian Guidelines for Sexual Health Education* are intended to inform programming that:

"Effective sexual health education provides opportunities for individuals to explore the attitudes, feelings, values and customs that influence their choices about sexual health."

- provides sexual health education within the context of the individual's moral beliefs, ethnicity, sexual orientation, religious background and other such characteristics.
- focuses on the self-worth and dignity of the individual.
- helps individuals to become more sensitive and aware of the impact of their behaviour on others. It stresses that sexual health is an interactive process that requires respect for self and others.
- is structured so that changes in behaviour and attitudes happen as a result of informed individual choice. They are not forced upon the individual by an external authority.
- does not discriminate on the basis of race, ethnicity, gender, sexual orientation, religious background, or disability in terms of access to relevant information (Health Canada, 2003, p. 8-9).

These statements acknowledge that sexual health education programs should not be "value free", but rather that:

- effective sexual health education provides opportunities for individuals to explore the attitudes, feelings, values and customs that influence their choices about sexual health.
- effective sexual health education supports informed decision-making by providing individuals with the opportunity to develop the knowledge, personal insight, motivation and behavioural skills that are consistent with each individual's personal values and choices (Health Canada, 2003, p. 22-23).

6. Does providing youth with sexual health education, including information on contraception and condom use, lead youth to become sexually active at an earlier age or to engage in more frequent sexual activity?

The answer to this question is a definitive "No". Research studies investigating the impact of sexual health education on adolescent behaviour have consistently found that providing contraceptive/safer sex information does not lead to earlier or more frequent sexual activity (Bennett & Assefi, 2005; Grunseit, et al., 1997; Kirby, 2000; 2001).

From a review of 28 methodologically rigorous evaluation studies, Kirby (2001) concluded that,

> Sexuality and HIV education programs that include discussion of condoms and contraception do not increase sexual intercourse; they do not hasten the onset of intercourse, do not increase the frequency of intercourse, and do not increase the number of sexual partners (p. 95).

7. Is there good evidence that sexual health education programs can effectively help youth reduce their risk of unintended pregnancy and STI/HIV infection?

The answer to this question is a definitive "Yes". There is now a large body of rigorous evidence in the form of peer-reviewed published studies evaluating the behavioural impact of well designed adolescent sexual health interventions that leads to the definitive conclusion that such programs are capable of significantly reducing sexual risk behaviour (For reviews of this literature see Alford, 2003; Bennett & Assefi, 2005; Jemmott & Jemmott, 2000; Kirby, 2000; 2001). Appendix 1 provides a list of program evaluation studies published in peer reviewed journals since 1990 demonstrating program effectiveness in delaying first intercourse and/or increasing the use of condoms or other contraceptive methods among program participants.

8. What are the key ingredients of behaviourally effective sexual health education programs?

At the most basic level, in order for school-based sexual health education programs to be effective, there must be sufficient classroom time devoted to sexual health related instruction and teachers must be adequately trained and motivated to provide high quality sexual health education programming (McKay, Fisher, & Maticka-Tyndale, & Barrett, 2001; Society of Obstetricians and Gynaecologists of Canada, 2004). In addition, it is clear from the research literature on sexual health promotion that effective programs are based and structured upon theoretical models that enable educators to understand and influence sexual health behaviour (Health Canada, 2003; Kirby, 2001; McKay, 2000). Health Canada's (2003) *Canadian Guidelines for Sexual Health Education* provide a framework for providing effective programming based on the Information-Motivation-Behavioural Skills (IMB) model of sexual health enhancement and problem prevention. For example, the IMB model specifies that in order for sexual health education for youth to be effective, it must provide information that is directly relevant to sexual health (e.g., information on effective forms of birth control

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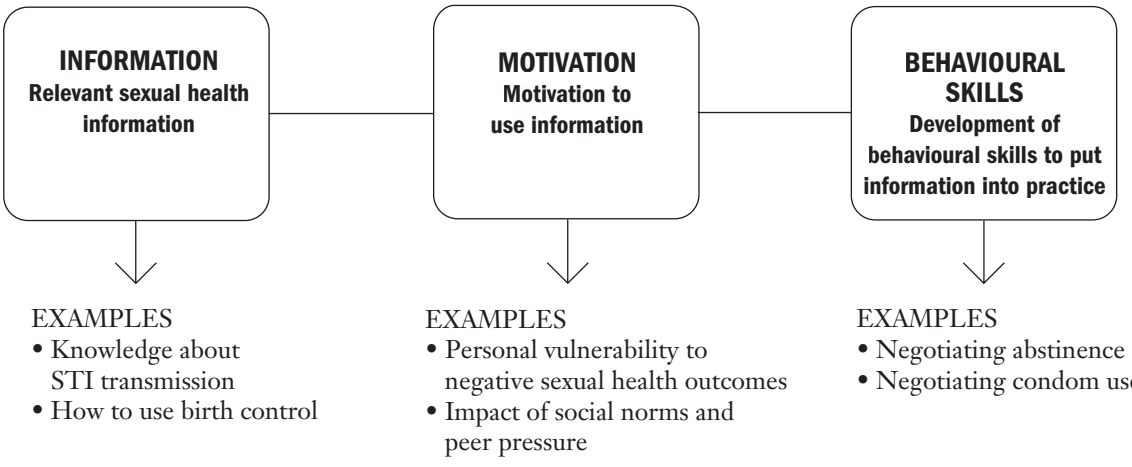
and where to access them), address motivational factors that influence sexual health behaviour (e.g., discussion of social pressures on youth to become sexually active and benefits of delaying first intercourse), and teach the specific behavioural skills that are needed to protect and enhance sexual health (e.g., learning to negotiate condom use and/or sexual limit setting) (For information on the use of the IMB model for the planning, implementation, and evaluation of sexual health education programs, see Health Canada, 2003).

At a more detailed level, review and analysis of the sexual health intervention literature indicate that effective sexual health education programs have contained the following ten key ingredients (Fisher & Fisher, 1998; Kirby, 2001; McKay, 2000):

1. Include sufficient classroom time to achieve program objectives;
2. Provide teachers with training and administrative support;
3. Employ theoretical models to develop and implement programming;
4. Use elicitation research to ascertain student characteristics, needs, and optimal learning styles;
5. Specifically target sexual behaviours that lead to unintended pregnancy and/or STI/HIV infection;
6. Deliver and consistently reinforce prevention messages related to sexual limit setting (e.g., delaying first intercourse, abstinence), consistent condom use and other forms of contraception;
7. Include activities that address social pressures related to adolescent sexual behaviour;
8. Incorporate the necessary information, motivation, and skills to effectively perform sexual health promotion behaviours;
9. Provide examples of and opportunities to practice (e.g., role plays) sexual limit setting, condom negotiation and other communication skills;
10. Employ appropriate evaluation tools to assess program strengths and weakness in order to enhance subsequent programming.

Figure 4.
The Information, Motivation, Behavioural Skills Model (IMB) for effective sexual health education



9. What is the impact of making condoms easily available to teenagers?

Research has clearly and consistently shown that the promotion and distribution of condoms to adolescents does not result in earlier or more frequent sexual activity, but condom distribution programs can significantly increase condom use among teens who are sexually active (Blake, Ledsky, Goodenow, et al., 2003; Guttmacher et al., 1997; Schuster, Bell, Berry & Kanouse, 1998; Sellors, McGraw & McKinlay, 1994). For example, Blake et al. (2003) in their study of high schools in Massachusetts found that students enrolled in schools with condom availability programs were not more likely to report ever having sexual intercourse but sexually active students attending schools with condom availability programs were significantly more likely to have used a condom at last intercourse than sexually active students at schools without condom availability programs (72% vs. 56%). This finding is consistent with previous research studies on the impact of school-based condom availability programs. In addition, condom distribution programs that are able to increase condom use in populations at high risk for STI have been shown, through cost-utility analysis, to result in considerable savings related to the medical costs associated with STI infection (Bedimo, et al., 2002).

10. What should we be telling young people about the effectiveness of condoms in preventing sexually transmitted infections?

Young people who abstain from sexual activity are highly unlikely to acquire a sexually transmitted infection (STI). However, young people who are or will become sexually active in the future should be fully informed of the effectiveness of condoms in preventing STI and should be strongly encouraged to use latex condoms consistently and properly if and when they engage in sexual activity. According to the Centre for Infectious Disease Prevention and Control, Health Canada (2002) "Condoms used consistently and correctly provide protection against getting or spreading an STI—including HIV (the virus that causes AIDS)" (p. 1). A large body of peer-reviewed scientific research clearly and definitively demonstrates that the consistent and proper use of latex condoms significantly reduces the risk of contracting an STI including HIV.

LABORATORY STUDIES: A number of laboratory studies have clearly established that HIV- or other STI-sized particles do not permeate latex condoms or, if leakage does occur, it is in an amount so small it makes infection extraordinarily unlikely (Carey et al., 1992; Conant et al., 1996; Lytle et al., 1992; Lytle et al., 1997; Rietmeijer et al., 1988; Van de Perre, Jacobs & Sprecher-Goldberger, 1987).

For example, a study carried out for the United States Food and Drug Administration indicated that a person who uses a latex condom during sexual intercourse is at least 10,000 times less exposed to HIV than a person who does not use a condom (Carey et al., 1992). Laboratory studies also indicate that latex condoms provide an impermeable barrier to the hepatitis B virus (Minuk et al., 1986; Minuk et al., 1987), herpes simplex virus (Conant, Spicer & Smith, 1984; Judson et al., 1983; Judson et al., 1989; Minuk et al., 1987; Smith et al., 1981), cytomegalovirus (Katznelson, Drew & Mintz, 1984; Minuk et al., 1987), Neisseria gonorroeae (Smith et al., 1981) and Chlamydia trachomatis (Judson et al., 1983; Judson et al., 1989).

Similar studies have also shown that latex condoms provide an essentially impermeable barrier to particles the size of human papillomavirus (HPV) (Gerberding, 2004).

POPULATION-BASED STUDIES: Several population-based studies have examined whether condoms prevent HIV transmission within couples where one partner is infected with HIV and the other is not. These studies indicate either that the

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couples who used condoms consistently had very low seroconversion rates compared to couples who did not use condoms (Fischl et al., 1987) or that none of the non-infected partners in couples who used condoms became infected (De Vincenzi, 1994; Laurian, Peynet & Verroust, 1989). For example, in the largest study of its kind, 256 HIV-infected men and women and their heterosexual seronegative partners were followed to determine the effectiveness of condoms in preventing HIV. During the study, 124 of the couples used condoms consistently, engaging in safer sex approximately 15,000 times. Among the 124 couples who practised safer sex consistently, none of the uninfected partners became infected with HIV (De Vincenzi, 1994).

"...there is clear and unequivocal evidence that consistent use of latex condoms significantly reduces the risk of STI and this is particularly the case for HIV/AIDS."

A review of recent well designed prospective studies found that, in addition to the prevention of HIV/AIDS, consistent condom use is also associated with reduced acquisition of genital HSV-2 (herpes), chlamydia, and gonorrhea by males and females, as well as accelerated regression of cervical and penile HPV-associated lesions and accelerated clearance of genital HPV infection in women (Holmes, Levine, & Weaver, 2004).

Condoms do not provide 100% protection against STI. However, there is clear and unequivocal evidence that consistent use of latex condoms significantly reduces the risk of STI and this is particularly the case for HIV/AIDS. Sexual health educators have a responsibility to inform their students of the scientific evidence concerning the facts about the effectiveness of condoms. With respect to common STIs such as chlamydia, the evidence clearly shows that the consistent use of condoms can, and does, reduce the potential negative outcomes of infection such as pelvic inflammatory disease, infertility, and chronic pelvic pain (Ness et al., 2004). With respect to HIV/AIDS, the evidence clearly shows that the consistent use of condoms can, and does, prevent infection. Thus, sexual health educators have a duty to inform people who are sexually active, or will become sexually active, about the benefits of consistently using latex condoms.

11. Should sexual health education teach young people about abstinence?

As suggested by Health Canada's (2003) *Canadian Guidelines for Sexual Health Education*, effective sexual health education "...supports informed decision-making by providing individuals with the opportunity to develop the knowledge, personal insight, motivation and behavioural skills that are consistent with each individual's personal values and choices" (p. 23). For many young people, these personal values and choices lead to the decision to abstain from sexual intercourse and other sexual activities. In addition, particularly for young teens who have not yet become sexually active, delaying first intercourse can be an effective way for adolescents to avoid unwanted pregnancy and STI/HIV infection. Therefore, it is important that school-based sexual health education for youth include, as one component of a broadly based program, the relevant information, motivation, and behavioural skills to abstain from sexual intercourse. There is some evidence to suggest that programs which focus on delaying first intercourse as part of a broadly based curriculum that also focuses on contraceptive/safer sex practices can help some adolescents who have not been sexually active previously to delay first intercourse (e.g., Jemmott, Jemmott & Fong, 1998; Kirby, Barth, Leland & Fetro, 1991).

12. Are "abstinence-only" programs an appropriate form of school-based sexual health education?

For a number of important reasons, school-based sexual health education programs that focus exclusively on sexual abstinence and that do not provide information and skills related to consistent contraceptive use and safer sex practices are inappropriate and ineffective.

Health Canada's (2003) *Canadian Guidelines for Sexual Health Education* suggest that programs should be provided in an age-appropriate manner that is "structured so that changes in behaviour and attitudes happen as a result of informed individual choice" (p. 8). More specifically, the Health Canada (2003) guidelines state that effective sexual health education, "...recognizes that responsible individuals may choose a variety of paths to achieve sexual health. They should have a right to accurate information that is relevant to those choices" (p. 23). As noted above, over two-thirds of Canadians have sexual intercourse before age 20 (Maticka-Tyndale, Barrett, & McKay, 2001) and it is therefore vitally important that youth receive the necessary information, motivation, and behavioural skills to consistently use effective contraception and practice safer sex for STI/HIV prevention when and if they become sexually active. Furthermore, as also noted above, the provision of contraceptive and safer sex information does not result in earlier or more frequent sexual behaviour among young people.

In addition, a large majority of so called "abstinence-only" sex education programs have been shown to be ineffective in reducing adolescent sexual behaviour. While a few abstinence-only programs have been shown to modify attitudes towards abstinence and sexual behaviour over short periods of time (up to six months), no evaluated abstinence-only program has resulted in delayed intercourse among abstinence program participants over longer periods of time compared to control groups or groups receiving broadly based sexual health education (Bennett & Assefi, 2005). Based on a review of program evaluations designed to measure the impact of abstinence-only interventions implemented in the United States, Hauser (2004) concluded that,

> Abstinence-only programs show little evidence of sustained (long-term) impact on attitudes and intentions. Worse, they show some negative impacts on youth's willingness to use contraception, including condoms, to prevent negative sexual health outcomes related to sexual intercourse. Importantly, only in one state did any program demonstrate short-term success in delaying the initiation of sex; none of these programs demonstrates evidence of long-term success in delaying sexual initiation among youth exposed to the programs or any evidence of success in reducing other sexual risk-taking behaviours among participants (p. 4).

"A large majority of so called "abstinence-only" sex education programs have been shown to be ineffective in reducing adolescent sexual behaviour."

13. Should sexual health education teach young people about sexual orientation?

Most school classrooms in Canada will likely have at least one or more students who are not heterosexual (For data on sexual orientation among Canadians, see Boyce et al., 2003; Leger Marketing, 2001). Health Canada's (2003) *Canadian Guidelines for Sexual Health Education* suggest that educational programs should acknowledge and address the diverse needs of all students, including those who are gay, lesbian, bisexual or transgendered. Surveys of Canadian parents indicate that a majority want sexual orientation addressed in school-based sexual health education programs (Langille, Langille, Beazley & Doncaster, 1996; McKay, 1996; McKay, Pietrusiak & Holowaty, 1998; Weaver, Byers, Sears, Cohen, & Randall, 2002). For example, in a study of New Brunswick parents, Weaver et al., (2002) found that over 80% supported the inclusion of the topic of "homosexuality" in the sexual health curriculum. An additional consideration is that gay, lesbian, and bisexual youth grow up in a culture that is normatively heterosexual and as a result the opportunities for these young people to learn information specific to their own sexual health may be greatly reduced, particularly in communities where homosexuality is largely invisible (Ryan & Futterman, 2001). The provision of information about sexual orientation can help to fulfil the sexual health education needs of gay, lesbian, and bisexual students as well as provide a context in which issues such as homophobia and discrimination based on sexual orientation can be addressed.

14. What are the social and economic benefits to society of implementing broadly based sexual health education in the schools?

The primary goals of sexual health education are to provide individuals with the necessary information, motivation, and behavioural skills to avoid negative sexual health outcomes and to enhance sexual health. In this respect, broadly based sexual health education in the schools can make a significant positive impact on the health and well-being of the community.

"Broadly based sexual health education in the schools can make a significant positive impact on the health and well-being of the community. Conversely, neglecting to provide such education can have significant social and economic consequences."

Conversely, neglecting to provide such education can have significant social and economic consequences. For example, untreated chlamydia infection (an increasingly common STI among Canadian youth) can lead to severe medical consequences including pelvic inflammatory disease (PID) and infertility, chronic pelvic pain, ectopic pregnancy, and increased susceptibility to HIV infection (see SIECCAN, 2004). Research from the United States suggests that the average lifetime medical costs for treatment of PID are $2,150 U.S. (Yeh, Hook, & Goldie, 2003). Treatment costs for chronic pelvic pain associated with PID are $6,350 U.S., for ectopic pregnancy, $6,840 U.S., and for infertility, $1,270 U.S. A recent review of the literature on the number of new cases of STIs among young people in the U.S. each year and the medical cost associated with them indicates that the economic burden resulting from STI infection in youth is $6.5 billion annually (Chesson, Blandford, Gift, Tao, & Irwin, 2004).

The socio-economic outcomes of teen pregnancy and parenthood are complex and do not lend themselves to simplistic notions of

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cause and effect (for a review of this literature see Bissell, 2000). However, it is fair to assume that, particularly for younger teens, unintended pregnancy and childbearing can have social and economic consequences for the young woman, her family, and the community.

As documented above, there is strong evidence that well developed broadly based sexual health education programs can significantly reduce unintended pregnancy and HIV/STI sexual risk behaviour among youth. Thus, the provision of high quality sexual health education programs in the schools has the potential to be of significant social and economic benefit to Canadian society. The existing literature on the direct costs and economic benefits of conducting school-based sexual health promotion interventions with youth suggests that such programming is not only cost effective but often results in significant cost savings (Wang, Burstein, & Cohen, 2002; Wang, Davis, Robin, et al., 2000). Because of the high monetary costs associated with negative sexual health outcomes such as HIV/AIDS, other STI, and unintended pregnancy in youth, even programs with very modest behavioural impacts are likely to result in substantial cost savings to the community (McKay, 2000).

"There is strong evidence that well developed broadly based sexual health education programs can significantly reduce unintended pregnancy and HIV/STI sexual risk behaviour among youth."

15. How can Health Canada's *Canadian Guidelines for Sexual Health Education* contribute to the initiation and maintenance of high quality sexual health education programming in the schools?

The *Canadian Guidelines for Sexual Health Education* are designed to guide and unify professionals working in fields that provide sexual health education. The Guidelines are grounded in evidence-based research placed in a Canadian context and offer curriculum and program planners, educators, and policy makers clear direction for the initiation, development, implementation and evaluation of effective sexual health education programs.

For example, at the initiation stage, the Guidelines can be used to facilitate discussion of the rationale and philosophy of school-based sexuality education with parents and other community stake-holders. The Guidelines include a checklist for assessing existing programs with respect to philosophy, accessibility, comprehensiveness, effectiveness of educational approaches and methods, training and administrative support, and planning/evaluation/updating/social development.

The Guidelines suggest a basic three-step process to sexual health education development:

Elicitation
program planners assess the target population's sexual health education needs;

Intervention
program planners develop and implement relevant and appropriate sexual health education programs;

Evaluation
program planners measure the effectiveness of the program and identify areas requiring modification.

"The Canadian Guidelines for Sexual Health Education provide a clear, easy to apply, evidence-based guide to the initiation, development, implementation, and evaluation of sexual health education in Canadian schools."

At the curriculum development and implementation stages, the Guidelines provide a framework for effective program content based

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on the information-motivation-behavioural skills (IMB) model for sexual health enhancement and problem prevention. The Guidelines specify that effective sexual health education integrates four key components: acquisition of knowledge; development of motivation and critical insight; development of skills; and creation of an environment conducive to sexual health.

In summary, the *Canadian Guidelines for Sexual Health Education* provide a clear, easy to apply, evidence-based guide to the initiation, development, implementation, and evaluation of sexual health education in Canadian schools. The Guidelines are available online from the Public Health Agency of Canada (www.phac-aspc.gc.ca/publicat/cgshe-ldnemss/cgshe_index.htm) or the Sex Information and Education Council of Canada (www.sieccan.org).

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APPENDIX: Evaluation research studies of adolescent sexual health education programs demonstrating a positive behavioural impact

All of the individual evaluation studies listed below were published in peer reviewed journals after 1990 and employed experimental (i.e., randomized control trial) or quasi-experimental (i.e., non-randomized control trial) designs. The findings indicated that the program resulted in delayed first intercourse and/or increased use of condoms or other contraceptive methods.

School-based

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Community-based interventions for youth

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