Sexual health education in the schools:

Questions & Answers
3rd Edition

SIECCAN
Sex Information and Education Council of Canada (SIECCAN)

Sexual health education in the schools: Questions & Answers (3rd edition)

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 (Public Health Agency of Canada, 2008). School-based programs are an essential avenue for providing sexual health education to young people. Educators, public health professionals, administrators, and others who are committed to providing high quality sexual health education in the schools 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 (www.sieccan.org) 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 basic democratic principles. Canadians have diverse values and opinions related to human sexuality.

Philosophically, this document reflects the democratic, principled approach to sexual health education embodied in the Public Health Agency of Canada's (2008) *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 principles and values offers a strong foundation for the development and implementation of high quality sexual health education programs in Canadian schools.

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

Sexual health is multidimensional and involves the achievement of positive outcomes such as mutually rewarding interpersonal relationships and desired parenthood as well as the avoidance of negative outcomes such as unwanted pregnancy and STI/HIV infection (Public Health Agency of Canada, 2008). Trends in teen pregnancy, sexually transmitted infections, age of first intercourse, and condom use are often used to generally assess the status of the sexual health of Canadian youth.

With respect to teenage pregnancy, it can be assumed that a large proportion of teen pregnancies, particularly among younger teens, are unintended. Teen pregnancy rates are therefore a reasonably direct indicator of young women's opportunities and capacity to control this aspect of their sexual and reproductive health. In Canada, the pregnancy rate (live births/induced abortions/fetal loss) for both younger (age 15-17) and older (age 18-19) teenage women has fallen significantly over the last several decades (McKay, 2006). More recently, the pregnancy rate among 15-19 year-old females declined from 47.6 per 1,000 in 1995 to 29.2 per 1,000 in 2005 (Statistics Canada, 2009). The recent decline in teen pregnancies has been most pronounced among younger teens aged 15-17, for whom the pregnancy rate declined from 28.5 per 1,000 in 1995 to 15.8 per 1,000 in 2005 (Statistics Canada, 2009).

Sexually transmitted infections (STI) pose a significant threat to the health and well-being of Canadian youth and the prevalence of common

STI such as Chlamydia and Human papillomavirus (HPV) is highest among youth and young adults. Chlamydia is of particular concern because, if left untreated, it can have serious long-term consequences for the reproductive health of women (Public Health Agency of Canada, 2006). Reported rates (the number of positive test reports made to public health agencies) of Chlamydia have been increasing steadily in recent years (Public Health Agency of Canada, 2009). However, it is important to recognize that reported rates are not a measure of prevalence (the percentage of the population that is infected) and that much of the increase in the reported rate of Chlamydia is likely due to the increasing use of more sensitive testing technologies and a greater number of young people being tested (McKay & Barrett, 2008). Nevertheless, small scale prevalence studies in Canada have found rates of Chlamydia infection ranging from 3.4% among young women tested at family physician's offices (Richardson, Sellors, Mackinnon, et al., 2003) to 10.9% among female street youth (Shields, Wong, Mann, et al., 2004). In sum, the prevalence of Chlamydia infection among youth and young adult Canadians is unacceptably high.

For a majority of Canadians, first sexual intercourse occurs during the teenage years (Maticka-Tyndale, 2008: Rotermann, 2008). Overall, the percentage of Canadian youth who report ever having had sexual intercourse has declined since the mid-1990's (Rotermann, 2008; Saewyc, Taylor, Homma, & Ogilvie, 2008). For example, data from the Canadian Community Health Survey indicates that the percentage of 18/19 year-olds who had ever had intercourse declined from 70% in 1996/1997 to 65% in 2005 (Rotermann, 2008). Research from both Canada and the United States indicates that oral sex is about as common as intercourse and typically occurs at about the same time as intercourse, although up to a quarter of teens may begin having oral sex before starting to have intercourse (Maticka-Tyndale, 2008).

The percentage of sexually active Canadian youth who report using a condom at last intercourse has increased in recent years (Rotermann, 2008; Saewyc, et al, 2008). For example, among the participants in the B.C. Adolescent Health Survey, condom use rose from 64.6% in 1992 to 74.9% in 2003 (Saewyc et al., 2008). Short-term trends are encouraging as well: For teens aged 15-19 participating in the Canadian Community Health Survey condom use at last intercourse rose from 72% in 2003 to 75% in 2005 (Rotermann, 2008).

While condom use among sexually active Canadian youth has clearly increased overall, there is also a persistent trend for the relatively high rates of condom use among younger sexually active teens to decline as teens get older (Rotermann, 2008; Saewyc et al., 2008). For example, among Canadian Community Health Survey participants aged 15-19, 81% of sexually active 15-17 year-olds reported using a condom at last intercourse compared to 70% of 18-19 year-olds (Rotermann, 2008). This pattern of condom use declining with age among sexually active young people has been clearly evident in other surveys of Canadian youth (Boyce, Doherty, Fortin, & MacKinnon, 2003; Saewyc et al., 2008). The propensity for older sexually active teens and young adults in Canada to discontinue consistent condom use is a clear indication that many young people in Canada underestimate their risk for sexually transmitted infection (Chlamydia reported rates are highest among 20-24 year-olds).

On basic indicators of sexual health, Canadian young people have made progress in many respects. Rates of teenage pregnancy have declined steadily, the percentage of teens who have had intercourse has also declined in recent years, and rates of condom use among sexually active young people have increased. However, there are important challenges that remain to be adequately addressed.

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The prevalence of sexually transmitted infections among Canadian young people is unacceptably high and poses a significant threat to their current and long-term health and well-being. Many gay, lesbian, bisexual, and questioning youth receive insufficient sexual health education relevant to their needs (For full discussion of the range of sexual health challenges facing Canadian youth see Maticka-Tyndale, 2008). In order to effectively promote the sexual health and overall well-being of our young people, Canadian families, schools, health care providers, public health agencies, governments, and communities must share in the responsibility to provide high quality sexual health education and services.

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

"Sexual health is a key aspect of personal health and social welfare that influences individuals across their life span" (Public Health Agency of Canada, 2008, p. 2). Because sexual health is a key component of overall health and well-being, "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., positive self-image and self-worth, integration of sexuality into mutually satisfying relationships).

Data from Statistics Canada shows that 65% of Canadian youth aged 18-19 have experienced sexual intercourse at least once (Rotermann, 2008), clearly indicating that most Canadians become sexually active during the teenage years. In order to ensure that youth are adequately equipped with the information, motivation/personal insight, and skills to protect their sexual and reproductive health, "it is imperative that schools, in cooperation 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).

As stated by the Public Health Agency of Canada (2008),

> **Since schools are the only formal educational institution to have meaningful (and mandatory) contact with nearly every young person, they are in a unique position to provide children, adolescents and young adults with the knowledge, understanding, skills, and attitudes they will need to make and act upon decisions that promote sexual health throughout their lives (p. 19).**

As a fundamental part of its contribution to the development and well-being of youth, school-based sexual health education can play an important role in the primary prevention of significant sexual health problems. As documented in more detail elsewhere in this resource document, well-planned and implemented sexual health education programs are effective in helping youth reduce their risk of STI/HIV infection and unplanned pregnancy. In addition, it should be emphasized that an important goal of sexual health education is to provide education on broader aspects of sexual health including the development of a positive self-image and the integration of sexuality into rewarding and equitable interpersonal relationships (Public Health Agency of Canada, 2008).

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

Parents and guardians are an important and primary source of guidance for young people concerning sexual behaviour and values. Many youth look to their parents as a valuable source of sexuality information (Frappier, Kaufman, Baltzer, et al., 2008).

Parents also recognize that the schools should play a key role in the sexual health education of their children. Studies conducted in different parts of Canada 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, Pietrusiak & Holowaty, 1998; Weaver, Byers, Sears, Cohen & Randall, 2002). A more recent survey from Saskatchewan (Advisory Committee on Family Planning, 2008) found that 92% of parents strongly agreed or agreed that sexual health education should be provided in the schools and 91% indicated that sexual health education that is appropriate for a child's age and developmental level should start before Grade 9.

"Studies conducted in different parts of Canada have consistently found that over 85% of parents agreed with the statement 'Sexual health education should be provided in the schools'..."

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

Surveys of youth have clearly shown that young people in Canada want sexual health education to be taught in school (Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003a; Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003b; McKay & Holowaty, 1997). For example, a 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 and sexual assault, sexual decision-making in dating relationships, birth control and safer sex practices, and STIs (Byers et al, 2003a). National surveys of youth in Canada have found that schools are the most frequently cited main source of information on sexuality issues (human sexuality, puberty, birth control, HIV/AIDS) (Boyce, Doherty, Fortin & Mackinnon, 2003) and rank highest as the most useful/valuable source of sexual health information (Frappier et al., 2008).

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 the basic and fundamental values and principles of a democratic society. An emphasis on democratic values provides the overall philosophical framework for many school-based sexual health education programs. The Public Health Agency of Canada's (2008) *Canadian Guidelines for Sexual Health Education* have been used by communities as a basis for the development of a consensus on the fundamental 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 sexual health programming that:

- Focuses on the self-worth, respect and dignity of the individual;
- Is provided in an age-appropriate, culturally sensitive manner that is respectful of individual sexual diversity, abilities, and choices;
- Helps individuals to become more sensitive and aware of the impact their behaviours and actions may have on others and society;
- Does not discriminate on the basis of age, race, ethnicity, gender identity, sexual orientation, socioeconomic background, physical/cognitive abilities and religious background in terms of access to relevant, appropriate, accurate and comprehensive information (Public Health Agency of Canada, 2008, p. 11-12).

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

- Effective sexual health education recognizes that responsible individuals may choose a variety of paths to achieve sexual health;
- Effective sexual health education supports informed decision making by providing individuals with the knowledge, personal insight, motivation, and behavioural skills that are consistent with each individual's personal values and choices (Public Health Agency of Canada, 2008, p. 25).

"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. "

6. Does providing youth with sexual health education lead to earlier or more frequent sexual activity?

The impact of sexual health education on the sexual behaviour of youth has been extensively examined in a large number of evaluation research studies. A meta-analysis of 174 studies examining the impact of different types of sexual health promotion interventions found that these programs do not inadvertently increase the frequency of sexual behaviour or number of sexual partners (Smoak, Scott-Sheldon, Johnson & Carey, 2006). More specifically, from a review of 83 studies measuring the impact of curriculum-based sexual health education programs, Kirby, Laris and Rolleri (2007) concluded that "The evidence is strong that programs do not hasten or increase sexual behavior but, instead, some programs delay or decrease sexual behaviors or increase condom or contraceptive use" (p. 206) (For additional reviews of the sexual health education evaluation literature see Bennett & Assefi, 2005; Kirby, Laris & Rolleri, 2005).

"The evidence is strong that programs do not hasten or increase sexual behavior but, instead, some programs delay or decrease sexual behaviors or increase condom or contraceptive use."

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

There is a large body of rigorous evidence in the form of peer-reviewed published studies measuring the behavioural impact of well-designed adolescent sexual health interventions that leads to the definitive conclusion that such programs can have a significant positive impact on sexual health behaviours (e.g., delaying first intercourse, increasing use of condoms). For example, the U.S. Centers for Disease Control and Prevention's *Compendium of Evidence-Based HIV Prevention Interventions* (CDC, 2008) includes programs for adolescents "…that have been rigorously evaluated and have demonstrated efficacy in reducing HIV or STD incidence or HIV-related risk behaviors or promoting safer behaviours" (online). For comprehensive reviews of the evaluation research literature demonstrating the positive behavioural impact of sexual health education see Bennett and Assefi (2005) and Kirby, Laris and Rolleri (2005; 2007).

"There is a large body of rigorous evidence...that leads to the definitive conclusion that such programs can have a significant positive impact on sexual health behaviours..."

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

In general, the primary objectives of "abstinence-only" programs are to encourage young people to not engage in sexual activity until they are married and to teach youth "…that sexual activity outside the context of marriage is likely to have harmful psychological and physical effects" (Title V, Section 510 of the U.S. Social Security Act cited in Trenholm, Devaney, Forston, et al., 2007). "Abstinence-only" programs purposefully do not teach young people the importance of consistent contraceptive use for unintended pregnancy prevention or condom use for STI/HIV infection prevention.

As stated by the Public Health Agency of Canada's (2008) *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. For example, some adolescents engage in partnered sexual activities whereas others will make an informed decision to delay these sexual activities (p. 25).

For many young people, these personal values and choices lead to a decision not to engage in partnered sexual activity until they are older. For young people who have not become sexually active, delaying first intercourse can be an effective way 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 needed to act on and affirm the choice not to engage in sexual activity.

"...some adolescents engage in partnered sexual activities whereas others will make an informed decision to delay these sexual activities."

The Public Health Agency of Canada's (2008) *Canadian Guidelines for Sexual Health Education* state that "Effective sexual health education recognizes that responsible individuals may choose a variety of paths to achieve sexual health" (p. 25). Educational programs that withhold information necessary for individuals to make voluntary, informed decisions about their sexual health are unethical (World Association for Sexology, 2008). "Abstinence-only" policies may violate the human rights of young people because they withhold potentially life-saving information on HIV and other STI (Ott & Santelli, 2007). According to Statistics Canada the average age of first sexual intercourse among Canadian young people aged 15 to 24 who have had intercourse is 16.5 years for both males and females (Rotermann, 2005). It is therefore vitally important that school-based sexual health education provides youth with the information, motivation, and behavioural skills to consistently practice effective contraception and safer sex practices such as condom use when and if they become sexually active. As shown elsewhere in this document, the provision of contraceptive and safer sex information does not result in earlier or more frequent sexual behaviour among young people.

"Educational programs that withhold information necessary for individuals to make voluntary, informed decisions about their sexual health are unethical"

A substantial body of research evidence clearly indicates that most "abstinence-only" sex education programs are ineffective in reducing adolescent sexual behaviour. For example, a multiple site randomized trial evaluation of "abstinence-only" programs authorized by the United States Congress and submitted to the U.S. Department of Health and Human Services found that students who had participated in these programs were not more likely to be abstinent or to delay first intercourse or to

have fewer sexual partners than students who did not receive "abstinence-only" education (Trenholm, Devany, Fortson, et al., 2007). These findings, indicating that "abstinence-only" programs are not effective in reducing the likelihood that youth will engage in sexual intercourse are consistent with the findings of other large scale studies (e.g., Kohler, Manhart, & Lafferty, 2008) and reviews of the program evaluation literature (e.g., Bennett & Assefi, 2005; Hauser, 2004). Based on a review of program evaluations designed to measure the impact of "abstinence-only" interventionsimplemented 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 behaviors among participants (online).

"A substantial body of research evidence clearly indicates that most "abstinence-only" sex education programs are ineffective in reducing adolescent sexual behaviour. "

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

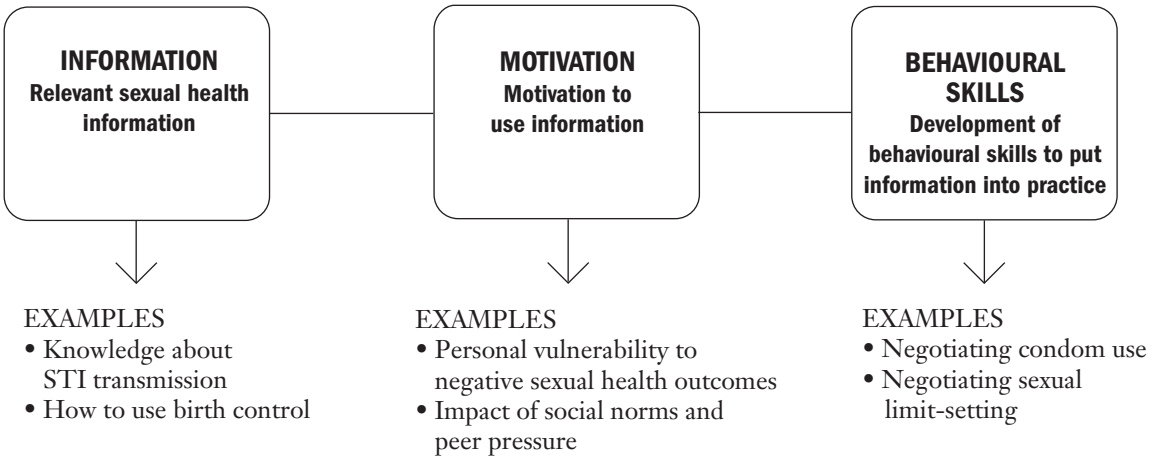
The first and most important ingredients of effective sexual health education programs in the schools are that sufficient classroom time is allocated to the teaching of this important topic and that the teachers/educators who provide it are adequately trained and motivated to do so (Society of Obstetricians and Gynecologists of Canada, 2004). As stated by the Public Health Agency of Canada (2008), "Sexual health education should be presented by confident, well-trained, knowledgeable and nonjudgmental individuals who receive strong administrative support" (p. 18). In addition, it is clear from the research on sexual health promotion that behaviourally effective programs are based and structured on theoretical models of behaviour change that enable educators to understand and influence sexual health behaviour (Albarracin, Gillette, Earl et al., 2005; Kirby, Laris & Rolleri, 2007; Public Health Agency of Canada, 2008).

The Public Health Agency of Canada's (2008) *Canadian Guidelines of Sexual Health Education* provide a framework for implementing effective programming based on the Information-Motivation-Behavioural Skills (IMB) model of sexual health enhancement and problem prevention (Albarracin, Gillette, Earl, et al, 2005: Fisher & Fisher, 1998). For example, the IMB model specifies that in order for sexual health education to be effective it must provide information that is directly relevant to sexual health (e.g., information on effective forms of birth control 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 the *Canadian Guidelines for Sexual Health Education* (Public Health Agency of Canada, 2008).

There is an extensive body of research that has indentified the key ingredients of effective sexual health promotion programming. (For a summary

Figure 1.

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



and review of this literature see Albarracin, Gillette, Earl, et al., 2005; Fisher & Fisher, 1998; Kirby, Laris & Rolleri, 2007; Public Health Agency of Canada, 2008; World Association of Sexology, 2008.) This research has clearly demonstrated that effective sexual health education programs will contain the following ingredients, listed in Table 1 below.

Table 1.

The key ingredients of effective sexual health promotion programming

1.	A realistic and sufficient allocation of classroom time to achieve program objectives.
2.	Provide teachers/educators with the necessary training and administrative support to deliver the program effectively.
3.	Employ sound teaching methods including the utilization of well-tested theoretical models to develop and implement programming (e.g., IMB Model, Social Cognitive Theory, Transtheoretical Model, Theory of Reasoned Action/Theory of Planned Behaviour).
4.	Use elicitation research to identify student characteristics, needs, and optimal learning styles including tailoring instruction to student's ethnocultural background, sexual orientation, and developmental stage.
5.	Specifically target the behaviours that lead to negative sexual health outcomes such as STI/HIV infection and unintended pregnancy.
6.	Deliver and consistently reinforce prevention messages related to sexual limit-setting (e.g., delaying first intercourse; choosing not to have intercourse), consistent condom use and other forms of contraception.
7.	Include program activities that address the individual's environment and social context including peer and partner pressures related to adolescent sexuality.
8.	Incorporate the necessary information, motivation, and behavioural skills to effectively enact and maintain behaviours to promote sexual health.
9.	Provide clear examples of and opportunities to practice (e.g., role plays) sexual limit setting, condom use negotiation, and other communication skills so that students are active participants in the program, not passive recipients.
10.	Incorporate appropriate and effective evaluation tools to assess program strengths and weaknesses in order to improve subsequent programming.

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

Research has clearly and consistently shown that making condoms accessible to young people does not result in earlier or more frequent sexual activity. The same research studies also show that condom distribution programs can significantly increase condom use among teens who are sexually active (Blake, Ledsky, Goodnow, et al., 2003; Guttmacher et al., 1997; Schuster, Bell, Berry & Kanouse, 1998). 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 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 without condom availability programs (72% vs. 56%). This finding is consistent with other 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 savings related to medical costs associated with STI infection (Bedimo, et al., 2002).

11. Are condoms effective in preventing HIV and other STIs?

According to the Public Health Agency (2002), "Condoms used consistently and correctly provide protection against getting or spreading STIs including HIV" (p. 1) and the *Canadian Guidelines on Sexually Transmitted Infections* (Public Health Agency of Canada, 2006) indicate that clinical and public health professionals, including physicians and nurses, should strongly recommend consistent condom use to prevent STIs among at risk persons (p. 334-338). The importance of condom use for prevention of STIs is echoed by the World Health Organization (WHO, 2000): "Condoms are the only contraceptive method proven to reduce the risk of all sexually transmitted infections (STIs), including HIV" (p. 1).

According to the U.S. Centers for Disease Control and Prevention (CDC, 2008), "Laboratory studies have demonstrated that latex condoms provide an essentially impermeable barrier to particles the size of HIV" (p. 2-3) and that "Latex condoms, when used consistently and correctly, are highly effective in preventing the sexual transmission of HIV" (p. 2). A laboratory study carried out by the U.S. Food and Drug Administration found that under extreme and highly unlikely conditions of stress (i.e., "worst-case condom barrier effectiveness") using a latex condom was estimated to reduce exposure to HIV by at least 10,000 times compared to not using a condom (Carey et al., 1992). The effectiveness of latex condoms in preventing HIV transmission has also been demonstrated in studies of actual condom use. For example, De Vincenzi (1994) followed 256 HIV-infected men and women and their heterosexual seronegative partners. During the study, 124 of the couples used condoms consistently, engaging in safer sex approximately 15,000 times. Among these consistent condom using couples, 0% of the uninfected partners became infected with HIV. In a Cochrane database systematic review of studies examining the effectiveness of condoms in reducing heterosexual transmission of HIV, Weller and Davis (2002) concluded that consistent condom use results in an 80% reduction in HIV incidence.

There is also strong evidence that consistent condom use significantly reduces the risk of transmission of Chlamydia and gonorrhea (Gallo, Steiner, Warner, et al., 2007; Paz-Bailey, Koumans, Sternberg, et al., 2005; Warner, Stone, Macaluso, et al, 2006), herpes (HSV-2) (Wald, Langenberg,

Krantz, et al., 2005) and Human papillomavirus (HPV) (Winer, Hughes, Feng et al., 2006).

In sum there is strong and conclusive evidence that consistent condom use significantly reduces the risk of sexually transmitted infections. Sexual health educators have a duty to inform youth who are sexually active or, who will become sexually active, about the benefits of condom use and to stress that "…like any other prevention tool, condoms work only when they are used. Consistent and correct use is essential for optimal risk reduction" (Steiner & Cates, 2006, p. 2642).

12. Should school-based sexual health education address the issue of sexual diversity?

The available research data on sexual orientation among Canadian youth (Boyce et al., 2003; McCreary Centre Society, 2007) indicates that most school classrooms in Canada will likely have at least one or more students who are not heterosexual. The Public Health Agency of Canada's (2008) *Canadian Guidelines for Sexual Health Education* suggest that educational programs should address the sexual health needs of all students, including those who are gay, lesbian, bisexual, transgendered or questioning. As well, the Guidelines note that an understanding of sexual diversity issues is an important component of sexual health education.

Surveys of Canadian parents indicate that a majority want sexual orientation addressed in school-based sexual health education programs (Advisory Committee on Family Planning, 2008; Langille, Langille, Beazley & Doncaster, 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. In a study of the effectiveness of sexual health education in British Columbia schools (Options for Health, 2004), parents, students, educators and public health workers acknowledged that the sexual health curriculum often failed to meet the needs of sexually diverse students, and that sexual diversity issues warranted more attention.

A supportive, non-threatening school environment has been recognized as being one protective factor that can potentially reduce the risk of negative health and social outcomes among youth (Saewyc, Homma & Skay, 2009). However, preliminary results (Egale, 2008) from a national survey on homophobia in Canadian schools indicates that over two thirds of lesbian, gay, bisexual, transgendered and questioning youth felt unsafe in their schools. Over half of these students reported being verbally harassed and over a quarter report being physically harassed because of their sexual orientation. The inclusion of sexual diversity issues in the sexual health curriculum can help encourage understanding and respect among students, and will contribute to a supportive and safe school environment that is the right of all students. (For more information on sexual diversity and the educational needs of LGBTQ youth see Public Health Agency of Canada, 2008.)

"The inclusion of sexual diversity issues in the sexual health curriculum can help encourage understanding and respect among students, and will contribute to a supportive and safe school environment …"

13. How should school-based sexual health education address the issue of emergency contraception?

The provision of accurate information about contraception allows youth to make informed sexual and reproductive health choices. With respect to emergency contraception (EC), it is important that clear information is provided about how the methods work, when they can be used for maximum effectiveness, and where they can be accessed. Emergency contraception has been used in North America for over two decades, and has been shown to be highly effective when used correctly (Pancham & Dunn, 2007). It can take the form of oral hormonal contraception (ECP) or the insertion of a post-coital copper intrauterine device (IUD). ECP can be taken up to 72 hours after unprotected intercourse, and the IUD can be inserted up to 120 hours after unprotected intercourse. Both methods prevent implantation and do not work if implantation has already occurred, and they therefore are not considered to cause abortion (Canadian Pediatric Society, 2003).

In Canada, ECP is available without a prescription from a licensed pharmacist. Minor youth do not need the permission of their parents or guardians to obtain ECP. Pharmacists are required to inform potential users about the drug, how it works and possible side effects. Pharmacists can refuse to supply ECP to minors only if there is reasonable doubt about the minor's ability to comprehend the information given. The insertion of a post-coital IUD must be done in a medical setting. In Canada, the age of consent for medical treatment can differ across provinces and territories. However, the concept of the mature minor will also apply on a case-by-case basis (Rozovsky, 2004). In provinces that haven't legislated an age of consent for medical treatment, the concept of the mature minor applies in every instance. This means that a youth can have an IUD inserted if the health practitioner believes that the information about the treatment, including possible risks and consequences, was fully understood by the patient (For more information on ECP see Panchan & Dunn, 2007).Youth should be made aware of any relevant provincial or territorial legislation that could affect their access to sexual health services.

14. How should school-based sexual health education address the issue of new laws on the age of sexual consent?

Age of consent refers to the age at which people are able to make their own decisions about sexual activity. In Canada, the age of consent was raised from 14 to 16 in 2008 (For a summary of the contents of the legislation and discussion of its implications see Wong, 2006). Effective sexual health education should provide students with a clear understanding of how age of consent is interpreted under the law. Educators should make youth aware that the intent of the legislation is to target adult sexual predators, not youth themselves and that the new legislation does not affect the right of young people to access sexual health education or sexual and reproductive health services. A five year peer group provision allows for youth aged 14 or 15 to have consensual sex with partners who are no more than five years older than themselves. As well, youth aged 12 and 13 can have consensual sex with other youth who are not more than 2 years older than themselves. Certain sexual activities are prohibited for those under the age of 18. The Criminal Code of Canada states that persons under the age of 18 cannot engage in anal intercourse except if they are legally married. Someone under the age of 18 cannot legally consent to have sex with a person in a position of authority such as a teacher, health care provider, coach, lawyer or family member. Persons under the age of 18 cannot legally consent to engage in sexual activity involving prostitution or pornography.

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

"Sexual health is a major, positive part of personal health and healthy living" (Public Health Agency of Canada, 2008, p. 8). 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. There is a growing recognition that the attainment and maintenance of sexual health for individuals, couples, and families is an important component of the overall well-being of the community (World Association for Sexual Health, 2008). Broadly-based sexual health education in the schools can make a significant positive contribution to the health and well-being of the community.

It is equally important to recognize that neglecting to provide broadly-based sexual health education programs can have far reaching social and economic consequences. For example, untreated Chlamydia infection (a common STI among Canadian youth and young adults) can lead to severe medical conditions including pelvic inflammatory disease (PID) and infertility, chronic pelvic pain, and ectopic pregnancy (Public Health Agency of Canada, 2006). It has been estimated that in Canada the costs of these conditions are approximately $1,942 for inpatient PID treatment, $6,469 for ectopic pregnancy, $324 for chronic pelvic pain, and $12,169 for the lifetime cost of infertility treatment (Goeree, Jang, Blackhouse et al., 2001). Goeree and Gully (1993) estimated that in 1990, the total cost of Chlamydia and associated sequelae was approximately $89 million and the total cost of gonorrhoea and associated sequelae was approximately $54 million. Given that the number of cases of these infections that are diagnosed annually has increased significantly since 1990 (see Public Health Agency of Canada, 2009), the total costs associated with these infections have also likely increased. Research from the U.S. on the average lifetime medical costs of PID further demonstrates the economic burden of STI (Yeh, Hook & Goldie, 2003). A review of the literature on the number of cases of STI among young people in the U.S. each year and the medical costs associated with them indicates that the economic burden resulting from STI among youth is $6.5 billion annually (Chesson, Blandford, Gift, Tao & Irwin, 2004) and, overall, it is estimated that the direct medical costs of HIV/STI in the U.S. for the general population are $12 to $20 billion annually (Chesson, Collins & Koski, 2008). It has been estimated that in Canada the direct and indirect costs of HIV/AIDS exceed $2 billion annually (Dodds, Coleman, Amaratunga & Wilson, 2001).

The socio-economic outcomes of teen pregnancy and parenthood are complex and do not lend themselves to simplistic conclusions on cause and effect (for a review of this literature see Best Start, 2007; 2008; 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 elsewhere in this resource document, there is strong evidence that well-developed, broadly-based sexual health education programs can significantly reduce high-risk sexual behaviour among youth and, as a result, provide substantial 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 suggest that such programming is not only cost effective but often results in considerable cost savings (Wang, Burstein & Cohen, 2002; Wang, Davis, Robin, et al., 2000).

"Broadly-based sexual health education in the schools can make a significant positive contribution to the health and well-being of the community."

16. How can the 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* (Public Health Agency of Canada, 2008) 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.

"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 by program planners:

Assessment
• assess the target population's sexual health education needs

Intervention
• develop and implement relevant and appropriate sexual health education programs

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

At the curriculum development and implementation stages, the Guidelines provide a framework for effective program content based on the information-motivation-behavioural skills (IMB) model (Fisher & Fisher, 1998) 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 (http://www.phac-aspc.gc.ca/publicat/cgshe-ldnemss/index-eng.php).

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