

Effective Evidence-Based Sexual Health Education for Youth: A Literature Review

Prepared for the Saskatchewan Prevention Institute

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Executive Summary

According to the World Health Organization, sexual health is more than the absence of disease and dysfunction. It is a state of physical, emotional, mental, and social well-being in relation to sexuality. Sexual health involves a positive and respectful approach to sexuality and sexual relationships, free of coercion, discrimination, and violence. Common indicators used to assess the sexual health of Canadian youth include sexual activity participation rates, age at first sexual intercourse, sexual frequency, number of sexual partners, condom use, sexually transmitted infection (STI) rates, and adolescent pregnancy rates. Many of these sexual health indicators have remained stable over time (e.g., age at first sexual intercourse), and others have shown improvement (e.g., condom use). Rates of STIs and adolescent pregnancy in Saskatchewan suggest, however, that ongoing sexual health education is important and necessary.

Barriers to sexual health among adolescents include accessibility, embarrassment, prejudice and stereotyping (e.g., being a member of a minority group), and inadequate sexual health education. Sexual health education is recognized as a right for all individuals, such that people should be provided with the knowledge, skills, and ability to make informed decisions about their sexuality and lifestyle. Sexual health education should equip individuals with the information and skills needed to enhance their sexual health and avoid negative sexual health outcomes. It is also important that sexual health education is inclusive, ensuring that the activities of sexual minorities are included.

Research has shown that abstinence-only, “sex negative” approaches to sexual health education do not improve sexual health as they do not result in reduced rates of STIs or adolescent pregnancy. Further, the World Association for Sexual Health suggests that educational programs that withhold information necessary for individuals to make voluntary, informed decisions about their sexual health are unethical. Instead, comprehensive approaches to sexual health education are recommended. Such approaches typically explain the potential benefits of delaying sex until individuals are emotionally and physically ready, but also ensure that young people are taught how to protect themselves from infections and pregnancy when they do decide to have sex. Evidence of the effectiveness of comprehensive approaches to sex education is vast. This type of education has been shown to reduce the risk of HIV, STIs, and unintended pregnancy through a decrease in high risk behaviours (e.g., evidence of delay of first intercourse, increasing condom and overall contraceptive use among sexually active youth, and increasing knowledge about sexual behaviour and its consequences).

Schools are the only formal education institution to have meaningful (and mandatory) contact with nearly every young person. For this reason, schools are in a unique position to provide children, adolescents, and young adults with the knowledge, understanding, skills, and attitudes required for them to make and act upon decisions that promote sexual health throughout their lives. Further, research has supported the contention that sexual health education in schools works. Well-planned and implemented sexual health education programs have been found to be effective in helping youth reduce the risk of STI/HIV infection and unintended pregnancies. Research shows that these programs do not inadvertently increase the frequency of sexual behaviour or number of sexual partners; instead, many

have been found to delay or decrease sexual behaviours and/or increase condom or contraceptive use. When surveyed, the majority of adolescents, parents, and school teachers indicate support for school-based sexual health education. In order for school-based sexual education to be effective, it is essential that teachers have the skills and support necessary to provide accurate sexual health information and to enact the most effective approaches for teaching the material. Specifically, teachers need the knowledge, skills, and comfort required for teaching about human sexuality in a developmentally and culturally appropriate manner. Institutional support from health and education systems is important, and sexual health education training opportunities are a key element of this support.

Many researchers have examined factors related to improving adolescent sexual health and sexual health education. Key ingredients to a successful sexual health education program include:

- a realistic and sufficient allocation of classroom time to achieve program objectives;
- necessary training and administrative support for teachers;
- identification of student characteristics, needs, optimal learning styles including tailoring to students' cultural background, sexual orientation, and developmental stage;
- specifically targeting behaviours that lead to negative sexual health outcomes (e.g., condom use);
- delivery and consistent reinforcement of prevention messages related to sexual limit-setting;
- incorporating the necessary information, motivation, and skills to effectively enact and maintain behaviours to promote sexual health;
- providing clear examples and opportunities to practice sexual limit-setting, condom use negotiation, and other related communication skills to ensure students are active participants.

In order to improve the sexual health of students, sexual health education must include appropriate learning opportunities to improve knowledge, skills, beliefs/attitudes, awareness of social support, awareness of preventive health services, and potential behavioural outcomes of sexual activity. It is also important that educators are provided with effective pre-service and in-service education, along with high quality teaching/learning materials (including print, media, and technology-based alternatives). Sexual health education programs are more likely to be successful if they are situated within a comprehensive school-community approach to promoting sexual health that includes accessible and convenient adolescent preventive health services, social support from parents and others in the community, a safe healthy physical environment in the school, and convenient access to condoms by youth. Supplementing classroom-based sexual health education with community-based sexual health resources and programs can further improve students' educational experience and, in turn, their sexual health.

For more information, including a list of references, please refer to the full report.

1. Introduction

In 2013, the Saskatchewan Prevention Institute began investigating the feasibility of creating a Community of Practice (CoP) related to adolescent sexual health. In February 2014, the Prevention Institute invited Tom Klaus, Ph.D., to facilitate a learning event focused on the creation of a CoP related to adolescent sexual health. Following this event, the Adolescent Sexual Health CoP Leadership Team disseminated a needs assessment survey to be completed by all those who expressed interest in the learning event (both attendees and non-attendees). The purpose of the survey was to provide feedback and input on the direction of the CoP. In June 2014, a report was created to summarize the responses gathered from the Adolescent Sexual Health CoP needs assessment survey.

Within this survey, respondents were asked to select topics in the area of adolescent sexual health that they would like to receive more information about. The majority of respondents indicated an interest in learning about how to create sexual health messages for youth. In response to this request for more information, the Prevention Institute commissioned this literature review. Unfortunately, the search for evidence-based literature related specifically to creating sexual health messages for youth was unsuccessful.¹ As such, the focus of the current literature review became best practices regarding youth-oriented sexual health education.

The primary objectives of this review are to: 1. provide an overview of the standard definitions of sexual health; 2. summarize the status of Canadian adolescents with respect to common sexual health indicators; 3. describe traditional approaches to sex education; 4. summarize evidence-based guidelines and practices pertaining to adolescent sex education; 5. identify organizations informing practice; and 6. provide local and national online sexual health resources. This literature review will be posted to the Prevention Institute's website and made available to members of the Adolescent Sexual Health CoP. The information may also be used to create new information resources to be disseminated by the Prevention Institute. Ultimately the altered direction of this literature review is complementary to the "How to Teach Sex Ed" workshops provided by Dr. Brian Parker, which were organized by the Prevention Institute and held in January 2015.

2. Defining Sexual Health

The World Health Organization (WHO, 2015) defines sexual health as:

a state of physical, emotional, mental, and social well-being in relation to sexuality. [It is] not just the absence of disease, dysfunction, or infirmity. [It involves] a positive and respectful approach to sexuality and sexual relationships [as well as the] possibility of having pleasurable and safe sexual experiences free of coercion, discrimination, and violence. The sexual rights of all persons must be respected, protected, and fulfilled (p. 1).

¹ Keyword search terms included, but were not limited to: sexual health messages; effective messages; media messages; adolescents; youth; teen; sex education; sexual health campaigns; sexual health curriculum; sexual health educators; evidence-based; best practices.

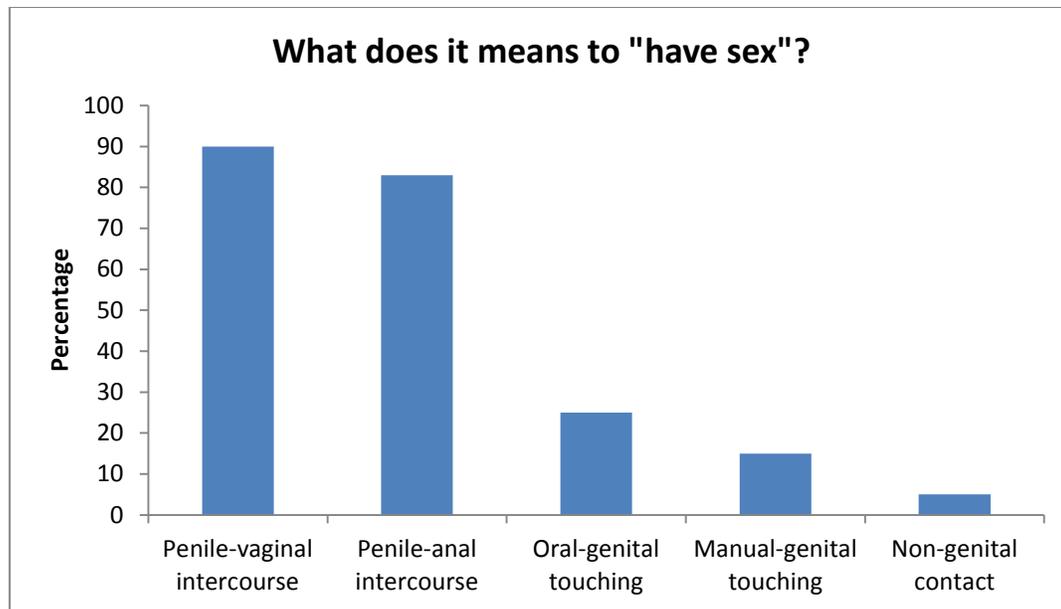
The Center for Disease Control and Prevention (CDC, 2012) provides a similar definition for sexual health, but also notes that sexual health can be impacted by socioeconomic and cultural contexts (e.g., policies, practices, services) that support healthy outcomes for individuals, families, and their communities.

Sexual health education is recognized as a right for all individuals (International Planned Parenthood Federation [IPPF], 2011; McKay & Bissell, 2010; Public Health Agency of Canada [PHAC], 2008) and should provide young people with the knowledge, skills, and ability to make informed decisions about their sexuality and lifestyle (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2013). The Canadian Guidelines for Sexual Health Education (PHAC, 2008) define sexual health education as “equipping individuals, couples, families, and communities with the information, motivation, and behavioural skills needed to enhance sexual health and avoid negative sexual health outcomes” (p. 5). Similarly, PHAC (2008) identifies two main goals of sex education in Canada: 1. improving positive sexual health outcomes (e.g., rewarding sexual relationships, informed reproductive decision-making); and 2. avoiding negative sexual health outcomes (e.g., avoiding sexually transmitted infections [STIs], unintended pregnancies, and sexual coercion).

Defining the term ‘sexual health’ can be difficult as it encompasses so many different aspects of human sexuality (PHAC, 2009). For example, youth may be less likely to practice safer sex (e.g., use condoms) during sexual acts they do not see as “having sex” (e.g., oral sex, anal intercourse). Further, when you ask individuals if they have “had sex” you may not get accurate responses because “having sex” can mean vastly different activities for different individuals. In order to make fully informed decisions regarding safer sex and STI prevention, youth need to understand the potential consequences of each of the different types of sexual behaviours.

It is important to be clear and inclusive when defining and measuring sexual behaviour. It is also important to ensure that the activities of other sexual minorities (e.g., LGBT*Q² youth) are included. The way in which traditional sexual health education curricula has been presented has largely ignored these individuals and the sexual behaviours they engage in (Pukall, 2014). Some individuals may subscribe to the common heteronormative definition of penile-vaginal intercourse when they define sex; while others may define sex as non-genital contact, manual-genital touching, oral-genital touching, or penile-anal intercourse. A recent survey of heterosexual Canadian university students illustrated the diverse meanings of “having sex” (Byers, Henderson, & Hobson, 2009). The chart below summarizes these results.

² LGBT*Q translates to lesbian, gay, bisexual, trans asterisk (i.e., transgender, transsexual, trans-identified), and queer. Trans asterisk or trans* is one word for a variety of identities that are diverse, but share a common denominator (Killerman, 2015).



A similar study asked adolescents aged 13 to 18 years about their sexual behaviour (Flicker et al., 2009). Among the sample that reported “having sex” (37%), there were variations in the behaviours reported. Specifically, almost three quarters (72%) had penile-vaginal intercourse, just over half (60%) had oral sex, and a smaller percentage (16%) had anal sex. However, among the sample that had reported not “having sex” (63%), when asked about the specific behaviours they had engaged in, some still reported having penile-vaginal intercourse (4%), oral sex (1%), or anal sex (1%). The results of these two studies highlight the importance of providing clear operational definitions when conducting research related to the sexual behaviours and practices of youth.

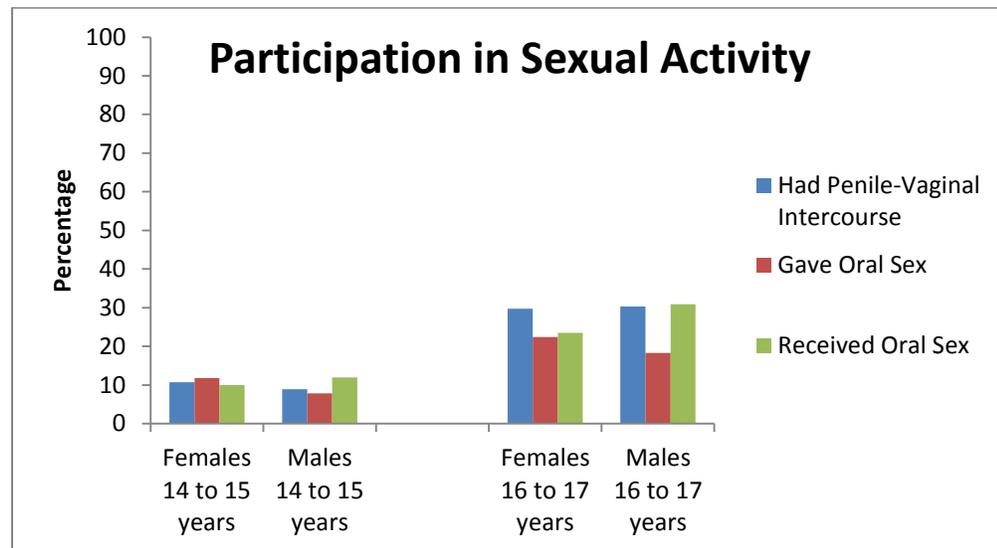
2.1 Sexual Health Indicators and the Sexual Health of Young Canadians

Common indicators used to assess the sexual health of Canadians include sexual activity participation rates, age at first sexual intercourse, sexual frequency, number of sexual partners, condom use, STI rates, and adolescent pregnancy rates (Pukall, 2014; McKay & Bissell, 2010). Sexual violence is another indicator often reported by researchers as it poses many significant consequences for sexual health (Canadian Federation for Sexual Health [CFSH], 2007).

2.1.1 Sexual Activity Participation Rates

As highlighted above, the attainment of accurate sexual activity participation rates can pose some difficulty for researchers due to differing definitions of sexual activity among youth. The mass media can also sensationalize the sexual behaviour of adolescents. For example, the rate of adolescent oral sex has been described in the media as an “epidemic,” when in fact research does not support this contention (Wind, 2008). A large-scale survey of American adolescents reported that similar numbers of adolescents have engaged in oral sex as have had penile-vaginal intercourse (Herbenick et al., 2010). The following chart summarizes the behaviours of male and female

adolescents with respect to their reported engagement in penile-vaginal intercourse and oral sex.



As suggested by the above chart, sexual activity tends to increase with age (Herbenick et al., 2010; Rotermann, 2012). With respect to age differences, results from the Canadian Community Health Survey (CCHS; Rotermann, 2012) indicate that 30% of 15 to 17 year olds reported engaging in sexual intercourse as compared to 68% of 18 to 19 year olds and 86% of 20 to 24 year olds.

2.1.2 Age at First Intercourse

The average age of first intercourse has remained relatively stable over time (Rotermann, 2012). In 2009-10, 9% of 15 to 24 year olds reported that they first had sexual intercourse when they were younger than 15, and about 25% had had intercourse for the first time at age 15 or 16 (Rotermann, 2012). These results were not significantly different from the 2003 data (Rotermann, 2012).

In 2011, a group of males and females aged 14 to 16 years were asked to report whether or not they had engaged in sexual intercourse (i.e., penile-vaginal intercourse) and, if so, what age they were the first time (Freeman et al., 2011). The majority of males and females reported never having engaged in sexual intercourse (73% and 76%, respectively). There was little variation with respect to age at first intercourse among males and females.

A criticism of this sexual health indicator being limited to penile-vaginal intercourse is that youth are also engaging in a variety of other behaviours that may put them at risk for STIs, including oral and anal sex (Pukall, 2014). A specific concern among some researchers is that adolescents may minimize the health risks associated with oral and

anal sex. Researchers found that many of the adolescents surveyed believed that oral sex was much less risky than penile-vaginal intercourse with respect to STIs (Halpern-Felsher, Cornell, Kropp, & Tschann, 2005). In fact, many STIs are transmitted via these sexual acts (Pukall, 2014).

2.1.3 Sexual Frequency and Number of Sexual Partners

Frequency of sexual intercourse (i.e., penile-vaginal intercourse) was assessed among a sample of Canadian male and female students in grades 7, 9, and 11 (Boyce et al., 2006). Similar percentages of students reported having intercourse once, a few times, and often – each 33%. Compared to a study conducted in 1989, youth in the more recent study reported having sex more frequently, but with fewer sexual partners. Specifically, 50% of the sampled youth in grades 9 and 11 reported having only 1 sexual partner (Boyce et al., 2006). Based on the results of the CCHS in 2003 and 2009-10, about one-third of sexually active 15 to 24 year olds reported having had sexual intercourse with more than one partner in the previous 12 months (Rotermann, 2012). The percentage of individuals reporting more than one sexual partner was higher among 15 to 17 year olds than among 20 to 24 year olds (35% versus 30%) (Rotermann, 2012).

2.1.4 Condom Use

Condom use among sexually active Canadian youth has increased. According to a 2010 survey of Canadian students, 75% of youth who reported having sex used a condom the last time they had sexual intercourse (Elgar & Pickett, 2011). In 2009-10, 68% of sexually active 15 to 24 year olds reported using condoms the last time they had intercourse, compared to 62% in 2003 (Rotermann, 2012). Reported condom use appears to be more common among those aged 15 to 17 years compared to those aged 18 to 19 years (Rotermann, 2008; McKay & Bissell, 2010). In other words, rates of condom use tend to decline as adolescents get older (Boyce, Doherty, Fortin, & MacKinnon, 2003; Rotermann, 2008; Saewyc, Taylor, Homma, & Ogilvie, 2008).

There are a number of reasons why individuals may not use a condom during sexual intercourse. These include:

- currently using some other method of birth control (e.g., birth control pill) (Boyce et al., 2006)
- not expecting to engage in sexual activity, so do not have condoms (Pukall, 2014)
- alcohol and drug use lowered inhibitions and impeded condom use (Boyce et al., 2006; Pukall, 2014)
- in a committed relationship and believe they have no need to use condoms because they have a faithful and/or safe partner (Boyce et al., 2006; Pukall, 2014)
- does not like using condoms or has a partner who does not like using them (Boyce et al., 2006; Pukall, 2014)

2.1.5 Sexually Transmitted Infection (STI) Rates

STIs are a significant and increasing public health concern, particularly with respect to the well-being of Canadian youth (PHAC, 2012; McKay & Bissell, 2010). Reported rates of common STIs such as chlamydia, gonorrhea, and syphilis have been steadily rising since the late 1990s (PHAC, 2012). As well, the prevalence of chlamydia, gonorrhea, and human papillomavirus (HPV) are highest among youth and young adults (PHAC, 2012; McKay & Bissell, 2010).

In 2010, the reported rate of chlamydia among females (363.8 per 100,000) was almost twice as high as that among males (189.5 per 100,000) (PHAC, 2012). Overall, females and males between the ages of 20 and 24 accounted for the highest reported rates of chlamydia (PHAC, 2012).

With respect to gonorrhea, females between the ages of 15 and 19 and males between the ages of 20 and 24 accounted for the highest reported rates (PHAC, 2012). However, the reported rate of gonorrhea was higher among males than females (37.7 per 100,000 in males vs. 29.1 per 100,000 in females) (PHAC, 2012).

Reported rates of infectious syphilis are also higher among males than females (9.4 per 100,000 in males vs. 1.0 per 100,000 in females) (PHAC, 2012). Reported rates of syphilis in men were the highest among those aged 30 to 39, while in women the highest rates were in the 20 to 29 year age group (PHAC, 2012). Infectious syphilis appears to be an increasing problem in Saskatchewan. For example, PHAC (2012) reported a 54% increase in infectious syphilis rates between 2001 and 2010.

Unlike in other parts of Canada, Saskatchewan has seen a substantial increase in the number of new cases of human immunodeficiency virus (HIV) since 2003. Although the rates have begun to decrease in the last few years, rates of new HIV infections in Saskatchewan have remained around twice the national average since 2008 (Saskatchewan Ministry of Health, 2014). Of the 129 new cases of HIV reported in 2013 in Saskatchewan, 81% were in those aged 20 to 49 years. While 66% of the overall cases were identified in males, women of childbearing age (ages 15 to 39 years) are one of the groups that has seen large increases in HIV infection rates in the last number of years. This is particularly true for the 20 to 29 age group, where female cases exceeded male cases in 2012 (Saskatchewan Ministry of Health, 2013).

2.1.6 Adolescent Pregnancy Rates

Adolescent pregnancy refers to pregnancy in women/girls who are aged 19 and under (Best Start, 2006). Reported rates account for the number of live births, fetal losses, stillbirths, and abortions per 1000 females aged 19 and younger (Best Start, 2006). Overall in Canada, the pregnancy rate (live births/induced abortions/fetal loss) for both young (age 15 to 17 years) and older (age 18 to 19 years) females has decreased

significantly over the last several decades (McKay, 2012). More specifically, the pregnancy rate among 15 to 19 year old females declined from 47.6 per 1000 in 1995 to 29.2 per 1000 in 2005 (Milan, 2013). The decline in adolescent pregnancies has been most pronounced among adolescents aged 15 to 17, for whom the pregnancy rate declined from 28.5 per 1000 in 1995 to 15.8 per 1000 in 2005 (Milan, 2013).

Compared to most of Canada, the adolescent pregnancy rate in Saskatchewan is high and has not decreased (Saskatchewan Prevention Institute, 2014). Between 2005 and 2010, the average pregnancy rate per 1,000 adolescent females aged 15 to 19 years was 45.9 (Saskatchewan Prevention Institute, 2014). During the same time period, the average pregnancy rate in Canada was 29.3 (McKay, 2012). Manitoba and the territories were the only areas in Canada that had higher rates than Saskatchewan during this time (Saskatchewan Prevention Institute, 2014).

2.1.7 Sexual Coercion and Sexual Violence

Although not regularly included as a sexual health indicator, sexual violence is important to consider. Sexual violence can have significant consequences for sexual health, including damage to the urethra, vagina, anus, and increased risk of an unintended pregnancy and/or contracting an STI (CFSH, 2007). Sexual violence can also have significant negative impacts on individual well-being, particularly due to the fact that most sexual crimes are committed by someone known to the victim (Sinha, 2013).

Despite the well-documented health ramifications of sexual violence, its incidence is not well-tracked in Canada, largely because acts often go unreported (CFSH, 2007; Sinha, 2013). Based on police-reported data, there were over 15,500 victims of sexual offences aged 15 years and older in 2009, most of whom were women (92%; Sinha, 2013). Among Canadian provinces, Manitoba and Saskatchewan recorded the highest rates of sexual offences, followed by Alberta and British Columbia (Sinha, 2013). However, the prevalence of sexual offences was 9 times higher in the Northwest Territories and 12 times higher in Nunavut compared to the provincial average (Sinha, 2013).

2.2 Barriers to Safer Sexual Behaviour

There are a number of key barriers to consider when examining sexual health among adolescents. These include informational barriers, social barriers, and barriers related to the social determinants of health. Research indicates that knowledge gaps pertaining to sexual health among adolescents are common. For example, a 2005 survey of adolescents aged 14 to 17 found that only 66% of females and 51% of males had heard of chlamydia (Frappier et al., 2008). As well, many adolescents were not aware that oral sex was a means of transmitting STIs, with some instead believing that poor hygiene can lead to STIs (Frappier et al., 2008). The adolescents within the sample also demonstrated little knowledge of the possible health consequences of STIs (Frappier et al., 2008).

PHAC (2007) identified the following informational barriers to learning about sexual health:

- accessibility (i.e., lack of sexual education resources and services in communities)
- embarrassment and judgment (i.e., young people may be reluctant to access information due to fear that confidentiality will not be maintained, discomfort with their body image, or general uneasiness in talking about sex)
- being a member of an ethnic/racial or sexual minority group (i.e., individuals who are most vulnerable to prejudice or stereotyping and frequently do not receive information that is relevant to them)

Despite most Canadian adolescents having access to sex education in their schools, this education may fail to adequately prepare them for the realities of sexual decision-making. Standard definitions of sexuality and sexual health used in some curricula do not account for the fact that sexuality is about much more than simply the physical and biological aspects of sex (Flicker et al., 2009). Adolescents also express some dissatisfaction with the topics covered in their sex education classes. When surveyed, some adolescents have indicated that they want their sex education to include information about engaging in healthy, sexually fulfilling relationships, and not just information on physical sexual health (Flicker et al., 2009).

As PHAC (2007) suggests, embarrassment and judgment can be strong barriers to safer sex behaviour. Adolescents have reported shyness with their partners when it comes to negotiating the use of contraceptives (Archibald, 2004). As well, some have reported embarrassment around the process of acquiring contraceptives (Archibald, 2004). Both shyness and embarrassment can therefore prevent adolescents from engaging in safer sex (Archibald, 2004). Other barriers include peer pressure, lack of planning, and being under the influence of substances (Battles & Weiner, 2002).

The social determinants of health also play a large role in sexual health. For example, poverty, violence, homelessness, family dysfunction, and many other factors related to sexual risk-taking behaviours can serve as barriers to participation in sexual health education programs (Kirby, 2002). Recognition of the impacts of the social determinants of health highlights the fact that all youth do not have equivalent knowledge, capacities, and opportunities to make fully informed choices about their sexual health and behaviour (PHAC, 2014). For many youth, their sexual health and information needs are less important when compared to other issues they face on a daily basis.

The previous sections highlight the fact that Saskatchewan adolescents are taking part in unsafe sexual behaviours, resulting in STIs, unplanned pregnancies, and other potentially negative outcomes. As already discussed, adolescents may engage in these types of behaviours for many reasons, including those related to the social determinants of health. Adolescents may also be lacking the knowledge needed to make informed decisions related to their sexual and reproductive health. Therefore, sexual health education is important in order to address potential gaps in knowledge and to help ensure adolescents are making informed decisions.

3. Approaches to Teaching Sex Education

3.1 Abstinence-only Approach to Sex Education

Abstinence-only sex education programs often have the following characteristics:

- promote abstinence from sex
- do not acknowledge that many youth will become sexually active
- do not teach about contraception or condom use
- avoid discussions about abortion
- highlight the risks of sexual behaviour (e.g., STIs and HIV) as reasons to remain abstinent (Advocates for Youth, 2007)

In contrast to “sex positive” approaches to sex education, abstinence-only “sex negative” approaches treat human sexual behaviour as largely harmful or problematic (Knerr & Philpott, 2011). Sex negative approaches tend to highlight the fact that sexual activity can potentially have a negative influence on individuals and society.

Providing information about the dangers of sex or pushing for abstinence may not be enough to reduce STIs or adolescent pregnancy rates. In support of this contention, researchers Ott and Santelli (2007) stated that abstinence-only policies may violate the human rights of young people because these policies result in potentially life-saving information on HIV and STIs being withheld. The World Association for Sexual Health (2008) echoed this concern stating that educational programs that withhold information necessary for individuals to make voluntary, informed decisions about their sexual health are unethical.

3.2 Comprehensive Sex Education Approach

In contrast to abstinence-only education, comprehensive sexuality education (CSE) emphasizes a holistic approach to human development and sexuality (UNESCO, 2013). This latter approach does not focus solely on teaching young people that they should abstain from sex until they are married (AVERT, 2014). Instead, these programs explain to young people the potential benefits of delaying sex until they are emotionally and physically ready, but also ensure that young people are taught how to protect themselves from infections and pregnancy when they do decide to have sex (AVERT, 2014). This approach also recognizes and promotes human rights; the knowledge, values, and skills necessary for preventing negative sexual health outcomes; and gender equality (UNESCO, 2013). Further, CSE often incorporates information related to the development of a positive self-image and the integration of sexuality into rewarding and equitable interpersonal relationships (PHAC, 2008). CSE that is scientifically accurate, culturally and age-appropriate, gender-sensitive, and life skills-based can provide youth with the knowledge, skills, and ability to make informed decisions about their sexuality and lifestyle (UNESCO, 2009).

Evidence of the effectiveness of comprehensive approaches to sex education is vast. These programs can reduce behaviours that put young people at risk of HIV, STIs, and unintended

pregnancy (CCL, 2009; Dennison, 2004; Kirby, Laris, & Rolleri, 2005; Swann, Bowe, McCormick, & Kosmin, 2003), including delay of first intercourse, increasing condom and overall contraceptive use among sexually active youth, and increasing knowledge about sexual behaviour and its consequences (UNESCO, 2009).

3.3 School- and Teacher-Based Sexual Health Education

Schools are the only formal education institution to have meaningful (and mandatory) contact with nearly every young person. For this reason, schools are in a unique position to provide children, adolescents, and young adults with the knowledge, understanding, skills, and attitudes required for them to make and act upon decisions that promote sexual health throughout their lives (PHAC, 2008). Further, research has supported the contention that sexual health education in schools works. In 2010, the Sexual Information and Education Council of Canada (SIECCAN) reported that well-planned and implemented sexual health education programs are effective in helping youth reduce the risk of STI/HIV infection and unintended pregnancy (McKay & Bissell, 2010). 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. In fact, some programs have been found to delay or decrease sexual behaviours and/or increase condom or contraceptive use (McKay & Bissell, 2010). There is also strong evidence to suggest that these programs do not encourage increased sexual activity or sexual risk behaviours (Kirby, Obasi, & Laris, 2006; Owen, Rhoades, Stanley, & Fincham, 2010; McKay & Bissell, 2010).

When surveyed, adolescents and their parents agree that schools should be responsible for providing broadly based sexual health education (McKay, 2004; McKay & Bissell, 2010). In fact, the majority of parents (85-92%) believe that sexual health education should be provided in school (Advisory Committee on Family Planning, 2008; McKay & Bissell, 2010). Requested topics to include in school-based sex education include puberty, reproduction, healthy relationships, STI/HIV prevention, birth control, abstinence, sexual orientation, and sexual abuse (McKay, 2004). Many teachers also report strong support for school-based sexual health education (Bickerton & deRoche, 2005; Cohen, Byers, Sears, & Weaver, 2004).

In particular, PHAC (2008) identified teachers as an important source of sexual health information for youth. Teachers are well-positioned to provide sexual health education because they are seen as trusted sources of information and often serve as role models, advocates, and mentors (James-Traore, Finger, Ruland, & Savariaud, 2004). In order to achieve these expectations, it is essential that teachers have the skills and support necessary to provide accurate sexual health information and enact the most effective approaches for teaching the material (Lokanc-Diluzio, Cobb, Harrison, & Nelson, 2007). Specifically, teachers need the knowledge, skills, and comfort required for teaching about human sexuality in a developmentally and culturally appropriate manner (James-Traore et al., 2004). Institutional support from health and education systems is important, and sexual health education training opportunities are a key element of this support (PHAC, 2008).

Regarding teachers' willingness to teach sexual health education, on average, teachers are only somewhat willing to teach sex education and their willingness varies between topics (Cohen et al., 2012). According to these authors, the three topics teachers are least willing to teach are sexual pleasure and orgasm, masturbation, and sexual behaviour. The three topics they are most willing to teach include body image, personal safety, and puberty. Factors that make teachers feel less willing to teach sex education include: not enough training and knowledge in the area; limited access to necessary resources; lack of time allocated to sex education; negative community attitudes toward sex education; negative anticipated reactions from parents; low comfort level and negative reactions of students; low individual comfort level answering questions; low comfort level talking about sexual health; and having to teach topics that conflict with personal beliefs (Cohen et al., 2012). Teachers who report greater willingness to teach sex education are more likely to be male, to be teaching middle school, have less teaching experience, have received training to teach sex education, feel more knowledgeable about sexual health, and view broad-based sex education as more important.

In general, Canadian students report being satisfied with their sexual health education teachers and their school-based sexual health education experiences (Meaney, Rye, Wood, & Solovieva, 2009). The topics students consider important to learn about in school include:

- STIs
- personal safety
- sexual coercion and sexual assault
- adolescent pregnancy and adolescent parenting
- dealing with peer pressure to be sexually active
- sexual decision-making in dating
- sexual problems and concerns
- building equal romantic relationships
- communicating about sex
- sexuality in the media
- sexual orientation
- attraction, love, and intimacy
- being comfortable with the other sex
- sexual behaviour
- sex as part of a loving relationship
- abstinence

Students also report a preference for receiving education about many sexual health topics earlier than they actually receive them (e.g., birth control methods and safer sex practices, sexual coercion and sexual assault, sexual decision-making, sexuality in the media, STIs, and adolescent pregnancy/parenting) (Meaney et al., 2009).

In 2010, SIECCAN researchers McKay and Bissell published "Sexual Health Education in the Schools: Questions & Answers Third Edition." This document is designed to support the provision of high quality sex education in Canadian schools. Specifically, this document provides answers to some of the most common questions that parents, community educators, program

planners, school and health administrators, and governments may have about sexual health education in schools. The answers to each of the questions are based upon and informed by the findings of up-to-date and credible scientific research. The answers highlight the need for sexual health education in schools, along with the benefits that can be gained through this type of education. The full list of common questions and summarized responses can be found in Appendix A.

3.4 Peer-to-Peer Sexual Health Education

There is considerable dispute regarding the best strategy for providing sex education in schools, with strong advocates for peer-led over teacher-led education (Ross, 2008). Peer education programs are commonly used to address youth sexual and reproductive rights and education (IPPF, 2004). Peer educators are individuals who belong to a group from a specific environment (e.g., school, workplace, etc.) who are trained to educate other members of the same group (IPPF, 2004). Specifically, with respect to sexual and reproductive health programs, youth are trained to offer information on these issues to their peers with the premise that young people may feel more comfortable receiving information from those of the same group (IPPF, 2004; Kim & Free, 2008).

Findings regarding the efficacy of peer-to-peer sexual health education interventions are mixed. While there are reported benefits for the peer educators themselves, including gaining valuable experience for future jobs (e.g., reference letters, education and career direction), a sense of community, personal growth, and counselling skills (Jaworsky et al., 2013), the impact that peer-led education has on improving sexual outcomes among adolescents has proven unconvincing (Kim & Free, 2008). Systematic reviews have found that most peer-to-peer interventions produce improvements in knowledge, attitudes, and intentions, but none have significant positive impacts on sexual health behavioural outcomes (Kim & Free, 2008).

4. Evidence-based Guidelines and Practices for Adolescent Sexual Health Education

4.1 Canadian Guidelines for Sexual Health Education

The third edition of the "Canadian Guidelines for Sexual Health Education" was published by the PHAC in 2009. The Guidelines are grounded on evidence-based research placed within a Canadian context and are written using language considered to be more inclusive of Canada's diverse populations. There were two main goals of the Guidelines: 1. to guide the efforts of professionals working in the area of sexual health education and promotion; and 2. to offer clear direction to assist local, regional, and national groups and government bodies concerned with education and health to develop and improve sexual health education policies, programs, and curricula which address the diverse needs of all Canadians. To be clear, these guidelines are not intended to provide specific curricula or teaching strategies. Instead, they are designed to accomplish the following:

- assist professionals concerned with the development and implementation of new and effective programs, services, and interventions that reinforce behaviours that support sexual health and personal well-being
- provide a detailed framework for evaluating existing sexual health education programs, policies, and related services available to Canadians
- offer educators and administrators a more thorough understanding of the goals and objectives of broadly based sexual health education

The key elements of effective sexual health education endorsed by PHAC (2009) are outlined in Table 1 below.

Table 1. Key Elements of Effective Sexual Health Education

Element	Description
Knowledge Acquisition and Understanding	Information relevant to personal sexual health; understanding of individual and cultural differences in beliefs about sexual health; information about ways to achieve/maintain sexual health
Motivation and Personal Insight	Acceptance of one's own sexuality; development of positive attitudes toward sexual health-promoting behaviour; critical awareness raising about sexual health issues
Skills that Support Sexual Health	Ability to formulate age-appropriate sexual health goals; ability to carry out sexual health promoting behaviours to reach those goals; ability to raise, discuss, and negotiate sexual health issues with partner(s); ability to evaluate and modify one's sexual health plan as necessary
Environments Conducive to Sexual Health	Developing personal awareness of environmental influences on sexual health; acquiring skills needed to identify and influence the social practices/policies/structures that affect and influence sexual health
Sexual Health Enhancement	Positive self-image and self-worth as an aspect of acceptance of one's own sexuality; integration of sexuality into mutually satisfying relationships; attainment and maintenance of sexual and reproductive health
Reduction of Negative Sexual Health Outcomes	Prevention of unintended pregnancy; prevention of STIs/HIV; prevention of sexual harassment/exploitation/abuse; prevention of sexual dysfunction

Based on the philosophy of sexual health education outlined in PHAC's 2009 document, there are five principles that characterize effective sexual health education programming. These are summarized in Table 2 below. These principles are described in much greater detail within the report. The report also includes helpful checklists for educators to ensure they are following the Guidelines.

Table 2. Principles Guiding Effective Sexual Health Education Programming (PHAC, 2009)

Principles	Guidelines
Principle 1: Accessibility	Effective sexual health education is accessible to diverse groups and takes into account different needs for information, motivation and skills development. It ensures the availability of educational services and the development of supportive and non-judgmental learning environments.
Principle 2: Comprehensiveness	A comprehensive approach to effective sexual health education addresses diverse sexual health promotion and illness prevention objectives and provides information, motivational inputs, and skills acquisition opportunities to achieve these objectives. This approach also considers sexual health education to be the shared responsibility of parents, peers, schools, health care systems, governments, media, and a variety of other social institutions and agencies.
Principle 3: Effectiveness of Educational Approaches and Methods	Effective sexual health education increases the knowledge, understanding, personal insight, motivation, and skills needed to achieve sexual health. It requires sensitivity to the needs, experiences, and circumstances of different groups, as well as of individual members within these groups.
Principle 4: Training and Administrative Support	Effective sexual health education involves institutional and administrative commitment and support. This support encourages the formal training of those individuals working in professional settings as well as the development of educational opportunities for parents, group leaders, and others providing more informal sexual health education.
Principle 5: Planning, Evaluation, Updating, and Social Development	Effective sexual health education programs require careful planning, realistic evaluation, and regular updating.

4.2 Characteristics of Successful Sex Education Programs

Many researchers have examined factors related to improving adolescent sexual health and have prescribed methods based on their research and practical findings. This next section will highlight some of the findings of researchers who work in the area of adolescent sexual health education.

Some of the first researchers to outline characteristics of successful sex education programs were Fisher and Fisher in 1998. A similar list has been provided by McKay and Bissell (2010) in SIECCAN's "Sexual Health Education in the Schools: Questions & Answers Third Edition" report. The following are the key components identified by these researchers:

1. Include sufficient time in the classroom to achieve program objectives.
2. Employ sound teaching methods including the utilization of well-tested theoretical models to develop and implement programming (e.g., Intention-Motivation-Behaviour [IBM] model, Social Cognitive Theory, Transtheoretical Model, Theory of Reasoned Action/Theory of Planned Behavior).
3. Provide teachers/educators with the necessary training and administrative support to deliver the program effectively.
4. Use elicitation research to identify student characteristics, needs, and optimal learning styles including tailoring instruction to students' ethno-cultural 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 classroom activities that address social pressures influencing adolescent sexual behaviour, including peer and partner pressures.
8. 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.
9. Incorporate effective evaluation tools to assess program strengths and weaknesses in order to improve subsequent programming and to establish program best practices.

According to Kirby (2007), three main categories of successful sex education programs are those that focus on sexual risk and protective factors, those that focus on non-sexual factors, and those that focus on both. Table 3 provides a summary of examples of programs that fall under each of these categories.

Table 3. Characteristics of Successful Sexual Health Programs

Program Category	Examples of Programs
Programs that focus on sexual factors	<ul style="list-style-type: none"> • Curriculum-based sex and STI/HIV education (e.g., abstinence and comprehensive programs) • Sex and STI/HIV education programs for parents and their adolescents • Stand-alone video- and computer-based instruction • Clinic-based programs • School-based and school-linked clinics and school condom-availability programs • Community-wide pregnancy or STI/HIV prevention initiatives with multiple components
Programs that focus on non-sexual factors	<ul style="list-style-type: none"> • Welfare reform for adults • Early childhood development programs • Youth development programs for adolescents
Programs that focus on sexual and non-sexual factors	<ul style="list-style-type: none"> • Programs that focus on substance use, violence, and sexual risk-taking • Programs that focus on sexual risk-taking, with sexuality and youth development components

Kirby's (2007) review provides evidence on the impact of each type of program in much greater detail. However, a brief explanation of the non-sexual factors that some programs focus on warrants further explanation. There are a number of non-sexual risk and protective factors that may affect adolescents' sexual behaviour. For example, with adolescent girls, the following can help to reduce pregnancy and birth rates: good performance in school; positive plans for the future; and strong connections to family, school, and faith community (Kirby, 2007). In his review, Kirby (2007) concludes that a wide variety of programs can be effective, especially if they target sexual risk and protective factors and behaviours.

A process for choosing a program is also outlined within this document. The first step is to take stock of what adolescents need and what resources the community already offers. Next, organizations should adopt one of three strategies: 1. when possible, implement reliable programs found to be effective for similar populations of adolescents; 2. if careful replication is not possible, select or design programs that incorporate the key characteristics of effective programs; or 3. if neither of those strategies is appropriate, develop a new program using the process typically completed by designers of effective sex and STI/HIV education programs. Finally, Kirby (2007) summarizes 17 characteristics he believes are essential for the development and implementation of effective curriculum-based adolescent sexual health programs. Characteristics are provided for each of the following: process of developing the curriculum, contents of the curriculum, process of implanting the curriculum, and activities and teaching methodologies. Each of these characteristics is summarized in Appendix B.

With respect to sexual health behaviours and a healthier environment, both have been found to be enhanced by education that seeks to promote a number of key factors (McCall, 2012). These key factors include:

- **Functional or practical knowledge about the health issue** – sexual health education should focus on the practical facts and knowledge that can truly influence health (e.g., when teaching about HIV/AIDS, include facts on how the virus attacks the T-cells in our bodies).
- **General and specific skills and aptitudes** – try to find lesson plans and activities that enable students to identify, learn, and practise decision-making, problem-solving, media literacy, refusal skills, and assertiveness.
- **Attitudes and beliefs that motivate behaviour or system change** – influence individual attitudes by incorporating group work, discussions, ranking, and categorization in the classroom.
- **Greater self-knowledge and self-esteem** – students should be encouraged to maintain a personal health journal, which can help them to identify their own traits, measure, monitor, and compare their attitudes and behaviours to others, and learn about various social and psychological influences on their health.
- **Easier access to health services and information** – include activities where students visit health clinics, pharmacies, and other places that offer sexual health services.
- **Overcome barriers to social support from parents, trusted adults, and others** – include activities that have students interacting with parents, friends, and others on health issues (e.g., advocacy projects where students seek changes to their schools and neighbourhoods).
- **Different ways to handle specific situations or risks** - address specific situations or challenges that students can face such as refusing alcohol at a party or assessing their relationships for potential abuse. Try to find lessons that present these problematic situations with practical tips on how to respond or avoid them and who to call for help.

Overall, research has supported the fact that behaviour change is facilitated by group work; self-monitoring; identifying personal benefits; setting goals and targets; devising coping strategies; accessing health services; social support from others; and overcoming physical, economic, and practical barriers to change (McCall, 2012). The Future of Sex Education (2014) Initiative highlights the importance of acknowledging the role that structural and contextual factors (e.g., personal, interpersonal, social, economic, and cultural) play in adolescents' sexual motivations and behaviour (Schalet et al., 2014).

4.3 Most Common Theoretical Model Applied to Sexual Health Education

A theoretical model often employed for guiding sexual health education curricula development is the Information, Motivation, Behavioural Skills (IMB) theoretical model (Fisher & Fisher, 1992, 1993, 2000, 2002; Fisher, Fisher, & Harman, 2003). This model specifies that effective sexual health education should help individuals become well-informed, become motivated to act, and possess the relevant behavioural skills to enhance their sexual health. With respect to sexual health education, this theory was designed to be easy to translate into theoretically-based,

behaviourally-focused sexual and reproductive health scenarios. For example, this theory is often applied to the scenario of condom use. Education related to this sexual behaviour will provide facts related to the effectiveness of condoms (information), role-playing opportunities to build confidence in condom use negotiation with sexual partners (motivation), as well as learning opportunities where youth can practice putting condoms on bananas or wooden dildos (behavioural skills). This theory has been used to design curricula for sexual health problem prevention and sexual health enhancement (McCall, 2012).

In order to effectively apply the IMB model, sexual health programs must include each of the information, motivation, and behavioural skills elements. The information provided should be:

- directly relevant to the sexual health behaviour in question
- easily translatable into problem prevention behaviour
- useable within the individual social reality of the person
- developmentally appropriate

In order to act on the information individuals receive, they must be personally and socially motivated to act. Personal motivation can be defined as the belief that the need to act applies to an individual personally; while social motivation can be defined as the belief that social norms will support their action. Finally, in order to prevent sexual health problems and to enhance sexual health, individuals must also possess the specific behavioural skills necessary to adopt specific sexual health promoting behaviours.

Sexualityandu.ca outlines the following structural elements that need to be included in effective sexual health education programs that make use of the IMB model:

- comprehensive curriculum that includes appropriate learning opportunities to improve knowledge, skills, beliefs/attitudes, awareness of social support, awareness of preventive health services, and potential behavioural outcomes
- sexuality education program is part of a comprehensive health education program, which in turn is part of a personal and social development program
- high quality teaching/learning materials, including print, media, and technology-based alternatives
- active learning and teaching methods
- effective pre-service and in-service education for teachers
- parental involvement in instruction through good communications with the home and through take-home learning activities
- active student involvement in adapting the program to local needs; peer leadership and education in the classroom and the school
- instructional program is situated within a comprehensive school-community approach to promoting sexual health that includes accessible and convenient adolescent preventive health services, social support from parents and others in the community, a safe healthy physical environment in the school, and convenient access to condoms by youth.

4.4 Sexual Health Resources

There are a number of Canadian and international organizations informing Canadian-based practices around sexual health education for youth. These include the Canadian Federation for Sexual Health, the Sex Information and Education Council of Canada, the Public Health Agency of Canada, and the World Health Organization. These organizations, among others, also provide resources that sexual health educators can access to improve their knowledge base and ability to teach students about factors related to sexual and reproductive health. For a list of organizations, along with example resources they offer, please refer to Appendix C.

At Dr. Brian Parker's "How to Teach Sex Education" workshop in January 2015, he provided a list of online resources related to sexual health. The resources cover a number of topics, including: facilitation skills, participatory teaching through drama, teaching sex education, birth control, STIs, healthy relationships, and sexual orientation. These resources may be useful to those wanting more information about adolescent sexual health and to those who work with adolescents in this area. The full list of resources, along with brief descriptions of each, can be found in Appendix D.

5. Recommendations for Improving School-Based Sex Education

To maximize the effectiveness of school-based sex education, there are two key elements many sexual health education researchers believe are essential to incorporate: 1. evidence-based approaches to behaviour change (i.e., scholarly, peer-reviewed research), and 2. research eliciting adolescent concerns. With respect to evidence-based approaches, theoretical models of behaviour change should be employed where possible (e.g., IMB model discussed earlier). In order for education to be effective, it is also important to obtain input from adolescents with respect to their needs and wants for sexual health education. The specific types of information and support required by adolescents will vary according to individual circumstances, as well as cultural or socioeconomic factors (CCL, 2009). An effective way to assess and meet the needs of adolescents is to consult with them about their specific concerns (Fisher, Fisher, Bryan, & Misovich, 2002).

Supplementing classroom-based sexual health education with community-based sexual health resources and programs can further improve students' educational experience (CCL, 2009). When these health services are convenient and youth-friendly, access and use of these services increases (McCall & McKay, 2003). There are a number of Canada-wide examples of school-based health clinic programs which have shown great success, including programs in Manitoba, Ontario, New Brunswick, Saskatchewan, and British Columbia (CCL, 2009). The Teen Wellness Clinic in Moose Jaw, Saskatchewan, is an example of this type of programming (see www.fhhr.ca). They offer private and confidential education and support to adolescents on topics such as sexuality, pregnancy, relationships, birth control, STIs, and suicide, to name a few.

6. Summary

Based on the above literature review, there are several key points to highlight:

- According to the WHO (2015), sexual health is more than the absence of disease or dysfunction. It is a state of physical, emotional, mental, and social well-being that involves a positive and respectful approach to sexuality and sexual relationships. Sexual health also includes the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.
- Common indicators used to assess the sexual health of Canadians include sexual activity participation rates, age at first sexual intercourse, sexual frequency, number of sexual partners, condom use, STI rates, adolescent pregnancy rates (Pukall, 2014; McKay & Bissell, 2010), and sexual violence (CFSH, 2007). The results of many of these indicators highlight the importance of, and the need for, sexual health education.
- Sexual health education is a right for all individuals (IPPF, 2011; PHAC, 2008; McKay & Bissell, 2010) and should provide young people with the knowledge, skills, and ability to make informed decisions about their sexuality and lifestyle (UNESCO, 2013).
- Abstinence-only sex education programs are seen as unethical by some (e.g., World Association for Sexual Health, 2008) because these types of programs withhold information necessary for individuals to make voluntary, informed decisions about their sexual health. Research has also shown that these programs are not effective in reducing STIs or adolescent pregnancy rates.
- In contrast, comprehensive sexuality education (CSE) programs can reduce behaviours that put young people at risk of HIV, STIs, and unintended pregnancy (CCL, 2009; Dennison, 2004; Kirby et al., 2005; Swann et al., 2003), including delay of first intercourse, increasing condom and overall contraceptive use among sexually active youth, and increasing knowledge about sexual behaviour and its consequences (UNESCO, 2009). CSE programs explain to young people the potential benefits of delaying sex until they are emotionally and physically ready, but also ensure that young people are taught how to protect themselves from infections and pregnancy when they do decide to have sex (AVERT, 2014).
- Schools are in a unique position to provide children, adolescents, and young adults with the knowledge, understanding, skills, and attitudes required for them to make and act upon decisions that promote sexual health throughout their lives (PHAC, 2008). Further, research has supported the contention that sexual health education in schools works. Well-planned and implemented sexual health education programs in schools have been found to be effective in helping youth reduce the risk of STI/HIV infection and unintended pregnancies (McKay & Bissell, 2010).
- Research has identified numerous characteristics that are necessary for successful sexual education programs. Some of these characteristics include: identifying students' needs and learning styles so that programs can be designed to meet these needs; providing sufficient classroom time to achieve the program objectives; providing clear examples and opportunities to practice sexual limit-setting, condom use negotiation, and other communication skills; employing sound teaching methods based on well-tested theoretical models; and providing educators with the necessary training and support.

- To maximize the effectiveness of school-based sex education, two key elements believed to be essential are: 1. evidence-based approaches to behaviour change (i.e., scholarly, peer-reviewed research), and 2. research eliciting adolescent concerns (i.e., obtain input from adolescents with respect to their needs and wants for sexual health education).
- Peer education programs are commonly used to address youth sexual and reproductive rights and education (IPPF, 2004). Findings regarding the efficacy of peer-to-peer sexual health education interventions, however, are mixed. While there are reported benefits for the peer educators themselves, including gaining valuable experience for future jobs (e.g., reference letters, education and career direction), a sense of community, personal growth, and counselling skills (Jaworsky et al., 2013), the impact that peer-led education has on improving sexual outcomes among adolescents has proven unconvincing (Kim & Free, 2008).
- Overall, research has supported the fact that behaviour change is facilitated by group work; self-monitoring; identifying personal benefits; setting goals and targets; devising coping strategies; accessing health services; social support from others; and overcoming physical, economic, and practical barriers to change (McCall, 2012).
- Numerous Canadian-based resources and guidelines are available to sexual health educators, to help them increase their knowledge base and ability to teach students about factors related to sexual and reproductive health.

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Appendix A. Common Questions Related to Sexual Health in Canada

Adapted from “Sexual Health Education in the Schools: Questions & Answers Third Edition” (McKay & Bissell, 2010)

Questions	Summarized Answers
<p>1. Sexual health and Canadian youth: How are we doing?</p>	<ul style="list-style-type: none"> • Adolescent pregnancy rates have declined • Common STI rates are high among adolescents • Fewer adolescents report engagement in sexual intercourse • More sexually active adolescents report using condoms • Condom use declines as youth age
<p>2. Why do we need sexual health education in the schools?</p>	<ul style="list-style-type: none"> • Sex education is recognized as a basic human right in Canada and a key aspect of personal health and social welfare • Plays an important role in primary prevention of significant sexual health problems
<p>3. Do parents want sexual health education taught in the schools?</p>	<ul style="list-style-type: none"> • Majority recognize schools should play a key role in sexual health education of their children • Majority agree sex education should be provided in schools
<p>4. Do young people want sexual health education taught in the schools?</p>	<ul style="list-style-type: none"> • Majority report wanting sex education to be taught in schools • School-based sex education is reported as a main source of information on sexuality issues and is ranked highest as the most useful, valuable source of information
<p>5. What values are taught in school-based sexual health education?</p>	<ul style="list-style-type: none"> • Canadian Guidelines for Sexual Health Education (PHAC, 2008) adopted by many communities (see http://www.sieccan.org/pdf/guidelines-eng.pdf)

<p>6. Does providing youth with sexual health education lead to earlier or more frequent sexual activity?</p>	<ul style="list-style-type: none"> • Research finds these programs do not increase the frequency of sexual behaviour or number of sexual partners • Some programs delay or decrease sexual behaviours or increase condom or contraceptive use
<p>7. Is there clear evidence that sexual health education can effectively help youth reduce their risk of unintended pregnancy and STI/HIV infection?</p>	<ul style="list-style-type: none"> • Large body of evidence in the form of peer-reviewed, published studies indicating that well-designed adolescent sexual health programs can have a significant, positive impact on sexual health behaviours
<p>8. Are “abstinence-only” programs an appropriate form of school-based sexual health education?</p>	<ul style="list-style-type: none"> • These programs are not endorsed by PHAC • Substantial body of research evidence indicates that most of these programs are ineffective in reducing adolescent sexual behaviour • Abstinence-only programs do not support informed decision-making by providing individuals the opportunity to develop the knowledge, personal insight, motivation, and behavioural skills that are consistent with each individual’s personal values and choices
<p>9. What are the key ingredients of behaviourally effective sexual health education programs?</p>	<ul style="list-style-type: none"> • Sufficient classroom time • Adequately trained and motivated teachers/educators • Based and structured on theoretical models of behaviour change that enable educators to understand and influence sexual health behaviour
<p>10. What is the impact of making condoms easily available to adolescents?</p>	<ul style="list-style-type: none"> • Can increase condom use • Does not result in earlier or more frequent sexual activity
<p>11. Are condoms effective in preventing HIV and other STIs?</p>	<ul style="list-style-type: none"> • When used consistently and correctly, they provide protection against getting or spreading many STIs, including HIV

<p>12. Should school-based sexual health education address the issue of sexual diversity?</p>	<ul style="list-style-type: none"> • Majority of Canadian parents want sexual orientation addressed in school-based sexual health education • Can act as a protective factor which can potentially reduce the risk of negative health and social outcomes of youth • Endorsed by PHAC
<p>13. Should school-based sexual health education address the issue of emergency contraception?</p>	<ul style="list-style-type: none"> • Considered to be part of comprehensive sexual health education • Endorsed by PHAC
<p>14. How should school-based sexual health education address the issue of new laws on the age of consent?</p>	<ul style="list-style-type: none"> • Discuss age of consent definitions and laws • Advise about certain sexual activities that are prohibited for those under the age of 18 (e.g., engaging in anal intercourse; having sex with a person in a position of authority) • Endorsed by PHAC
<p>15. What are the social and economic benefits to society of implementing broadly based sexual health education in the schools?</p>	<ul style="list-style-type: none"> • Evidence to support that broadly-based sexual health education in schools can make a significant positive contribution to the health and well-being of the community • Reduces health costs of untreated STIs, unintended pregnancies, and risky sexual behaviours
<p>16. 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?</p>	<ul style="list-style-type: none"> • Designed to guide and unify professionals in the field • Clear, easy-to-apply • Grounded in evidence-based research placed in a Canadian context • Offer curriculum and program planners, educators, and policy makers clear direction for the initiation, development, implementation, and evaluation of effective sexual health education

Appendix B. Characteristics of Effective Curriculum-Based Programs

Process of Developing the Curriculum

- Involved multiple people with expertise in theory, research, sex and STI/HIV education to develop the curriculum
- Assessed relevant needs and assets of the target group
- Used a logic model approach that specified the health goals, the types of behaviour affecting those goals, the risk and protective factors affecting those types of behaviour, and activities to change those risk and protective factors
- Designed activities consistent with community values and available resources (e.g., staff time, staff skills, facility space and supplies)
- Pilot-tested the program

Contents of the Curriculum Itself

Curriculum Goals & Objectives

- Focused on clear health goals – the prevention of STI/HIV, pregnancy, or both
- Focused narrowly on specific types of behaviour leading to these health goals (e.g., abstaining from sex or using condoms or other contraceptives), gave clear messages about these types of behaviours, and addressed situations that might lead to them and how to avoid them
- Addressed sexual psychosocial risk factors and protective factors that affect sexual behaviour and changed them (e.g., knowledge, perceived risks, values, attitudes, perceived norms, and self-efficacy)

Activities & Teaching Methodologies

- Created a safe social environment for young people to participate
- Included multiple activities to change each of the targeted risk and protective factors
- Employed instructionally sound teaching methods that actively involved participants, that helped them personalize the information, and that were designed to change the targeted risk and protective factors
- Employed activities, instructional methods, and behavioural messages that were appropriate to the adolescents' culture, developmental age, and sexual experience
- Covered topics in a logical sequence

Process of Implementing the Curriculum

- Secured at least minimal support from appropriate authorities, such as departments of health, school districts, or community organizations
- Selected educators with desired characteristics (whenever possible); trained them; and provided monitoring, supervision, and support
- If needed, implemented activities to recruit and retain adolescent participants and overcame barriers to their involvement (e.g., publicised the program, offered food, or obtained consent)
- Implemented virtually all activities with reasonable reliability

Appendix C. Organizations Informing Canadian-Based Practice

The following are examples of agencies informing sexual health education practice as well as resources that sexual health educators can access to improve their knowledge base and ability to teach students about factors related to sexual and reproductive health.

Canadian Federation for Sexual Health (CFSH)

- Formerly Planned Parenthood Federation of Canada
- Voluntary, charitable organization
- Promotes sexual and reproductive health and rights in Canada and abroad
- Pro-choice, dedicated to supporting access to comprehensive sexual health education, information, and services
- http://www.cfsh.ca/about_cfsh/

Public Health Agency of Canada (PHAC)

- Mission is to promote and protect the health of Canadians through leadership, partnership, innovation, and action in public health
- Regularly publishes reports related to Canadian sexual health issues and statistics (e.g., STIs)
- Develops and publishes guidelines for sexual health education
- <http://www.phac-aspc.gc.ca/index-eng.php>

World Health Organization (WHO)

- Directing a coordinating authority for health within the United Nations system
- Responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends
- Regularly develops, publishes, and updates reports related to sexual and reproductive health education and programming
- <http://www.who.int/en/>

Society for Obstetricians and Gynaecologists Canada (SOGC)

- Comprised of over 3500 professional members, including gynaecologists, obstetricians, family physicians, nurses, midwives, and allied health professionals
- Mission is to promote excellence in the practice of obstetrics and gynaecology and to advance the health of women through leadership, advocacy, collaboration, and education
- Committed to global women's health, advocacy, aboriginal health, public education, patient safety, and human resources in obstetrics and gynaecology
- Regularly publishes peer-reviewed papers and reports related to sexual and reproductive health education, counselling, and programming
- Developed the Journal of Obstetrics and Gynaecology Canada (JOGC)
- <http://sogc.org/>

Best Start Resource Centre: Ontario's Maternal, Newborn, and Early Child Development Resource Centre

- Key program of Health Nexus, a bilingual health promotion organization that works with diverse partners to build healthy, equitable, and thriving communities
- Supports service providers who work in preconception health, prenatal health, and early child development
- Produces multi-media resources in multiple languages on a broad range of topics related to preconception health, prenatal health, and early child development
- Publishes reports related to adolescent pregnancy
- <http://en.beststart.org/>

Canadian AIDS Treatment Information Exchange (CATIE)

- Canada's source for up-to-date, unbiased information about HIV and hepatitis C
- Connects people living with HIV or hepatitis C, at-risk communities, healthcare providers, and community organizations with the knowledge, resources, and expertise to reduce transmission and improve quality of life
- Delivers up-to-date treatment, prevention, healthy living, and programming content in varied formats and media
- Partners with frontline organizations to develop targeted resources
- <http://www.catie.ca/en/home>

Sex Information and Education Council of Canada (SIECCAN)

- A national registered charitable organization founded in 1964 to foster professional education and public knowledge about sexuality and sexual health
- Works with health professionals, educators, and community organizations to ensure that all Canadians have access to high quality sexual health information, education, and related health and social services
- Developed the Canadian Journal of Human Sexuality (CJHS)
- Highlights from 2012-2013: released the *Report on Adolescent Pregnancy Rate Trends in Canada* and the *Trojan/SIECCAN Sexual Health Study*; provided consultation to OPHEA on *Sexual Health Education in the Schools*; published the third edition of *Sexual Health Education in the Schools: Questions and Answers*
- <http://www.sieccan.org/>

Appendix D. Online Sexual Health Resources

Facilitation Skills

- www.trainingforchange.org – Collection of tools and principles for group facilitation.
- http://www.treegroup.info/topics/facilitation_primer.pdf - Basic group facilitation ideology and techniques.
- http://www.lupinworkscom/roche/workshops/Participatory_Workshops.pdf - Explains the ideology of participatory workshops and facilitation within a framework of teaching about HIV.

Participatory Teaching through Drama

- www.angelfire.com/ego/edp303/intro.htm - Explanation of why drama is effective in classrooms.
- <http://bible.org/seriespage/teaching-through-role-playing> - Short outline on role-playing in classrooms.

Teaching Sex Education

- www.teachingsexualhealth.ca – Alberta-based resources with suggestions for teachers about preparing to teach sexual health and preparing students and parents for these classes. Includes fact sheets on many topics including sexuality, STIs, and contraception.
- www.sieccan.org – The Sexual Information and Education Council of Canada’s website including links to numerous reports and studies addressing adolescent sexual health.

Birth Control

- www.sexualhealthcentresaskatoon.ca – A pro-choice organization which provides information on contraception, pregnancy options, STIs. Includes specific pages for parents and healthcare providers.
- www.plannedparenthoodregina.com – A pro-choice organization which provides information related to contraception, pregnancy options, and STIs. Site includes links to games, fun facts, and information on emerging sexual health trends.
- www.planetahead.ca – Website aimed at adolescents with easy to access information on birth control, condoms, STIs, and sexual decision-making. Includes games about sexual decision-making.
- www.cfsh.ca – Canadian Federation for Sexual Health website. Addresses health, sexuality, pregnancy options, and contraception.
- www.plannedparenthood.org/teen-talk/ - Website by Planned Parenthood with information about birth control, negotiating relationships, STIs, and a section for LGBT*Q youth. Resources are based in the U.S.

Sexually Transmitted Infections

- www.skprevention.ca – Provides information on HIV/AIDS, STIs, healthy choices, First Nations traditional teaching, and parents as educators.
- www.youthco.org – Basic and easy to understand information about HIV and Hepatitis C.
- www.sexualityandu.ca – A large site with sections for adolescents, adults, and health professionals. Addresses everything from STIs to contraception, pregnancy, and sexual assault. Run by SOGC.
- www.positive.org – Promotes positive sexuality in youth, including information about sexual rights and negotiating sexual boundaries for individuals and their partners.
- www.takecaredownthere.org – Website by Planned Parenthood with videos for youth about STIs and communication within relationships. Resources are based in the U.S.

Healthy Relationships

- www.sexlifecanada.ca/users/spider-bytes – A large resource developed by the Canadian Federation for Sexual Health which addresses sex, sexuality, relationships, and puberty in question and answer, as well as short fact sheet, format.
- http://www.sexualityandu.ca/pdfs/CTR_AgeOfConsent.pdf - SIECCAN fact sheet explaining age of consent and other legal considerations for adolescents, including their legal sexual rights.
- www.casac.ca – Canadian Association of Sexual Assault Centres website. Includes information about sexual assault and a listing of anti-violence centres in Canada.
- www.goaskalice.com – Large website managed by Columbia University. Answers questions asked by teens on a variety of topics, including sexual health and relationships and emotional health.
- www.scarleteen.com – Large website in question and answer format addressing sex and sexuality.
- www.sexetc.org – Website aimed at youth addressing sexuality and relationships. Includes a section with comics and quizzes about these topics.
- www.reachout.com.au – Australian website with fact sheets about topics ranging from relationships and violence to sex and sexuality.
- www.kickaction.ca – Canadian website for empowering young women by addressing various topics in a blog style.

Sexual Orientation

- www.avenuecommunitycentre.ca – A Saskatoon-based organization which works to address health and social issues among the LGBT*Q community.
- www.pflagcanada.ca – Website for youth and parents about becoming comfortable with various sexual orientations and support for those struggling with homophobia and bullying.
- www.biresources.net/biyouth.shtml - Resources and tips for bisexual youth. Includes information on coming out as well as a section for parents of bisexual youth.
- www.qmunity.ca/youth - A Vancouver-based website which offers resources, information about coming out, general sexual health information, and trans*-specific health information.
- www.amplifyyourvoice.org/youthresource - A website by and for LGBT*Q youth. Includes information about queer living, health, body image, and substance abuse. Also provides links to queer blogs and videos.