

THE FACTS ON ...

Teen Pregnancy, Sexually Transmitted Infections (STI), HIV & AIDS

Updated September 2007

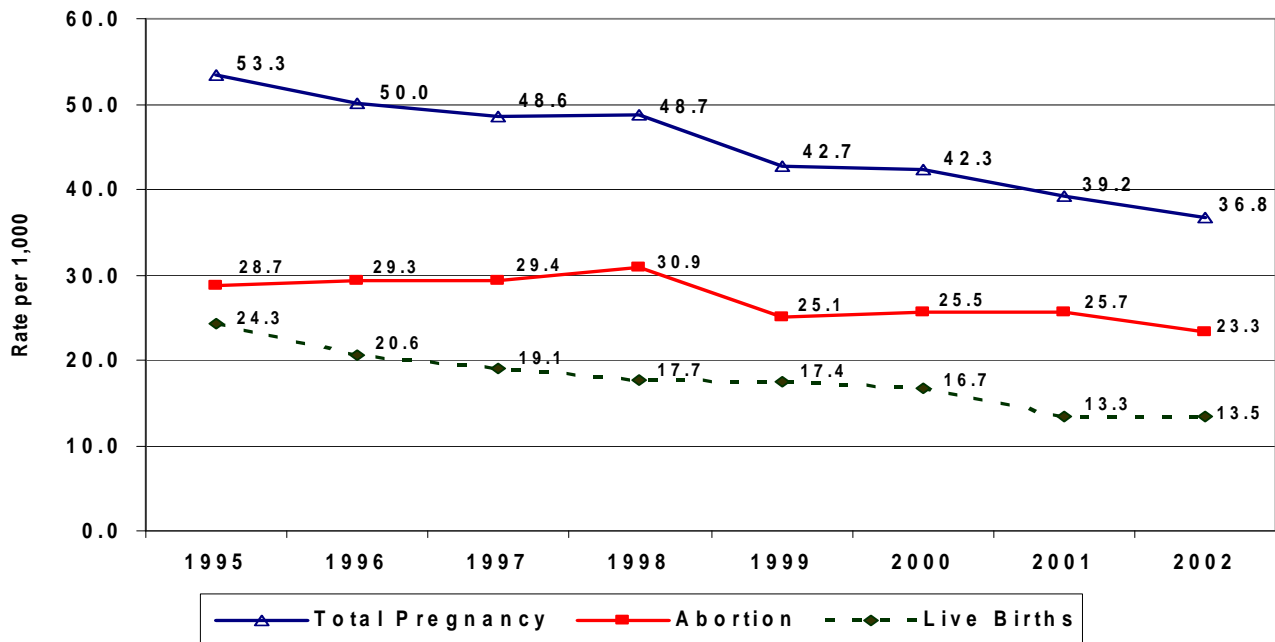
TEEN PREGNANCY

TEEN PREGNANCY STATISTICS

Calgary Region^{*}

- From 1995 to 2002, the teen pregnancy *rate for teens aged 15-19 in the Calgary Region steadily declined from 53.3 to 36.8.¹
- In the year 2002, the teen birth *rate was 13.5 compared to 24.3 in 1995.¹
- In the year 2002, the teen **abortion rate was 23.3 compared to 30.9 in 1998.¹
- In the years 2001-2003 (combined), the estimated pregnancy *rate for youth aged 10-17 was 7.2.²

Pregnancy Rates among 15 to 19 Year Olds in the Calgary Health Region^{*1}



Alberta

- From 1998 to 2004 the pregnancy *rate for Alberta teens aged 15-19 declined from 50.8 to 37.5.³ The pregnancy rate increased slightly to 37.6 in 2005.³
- In the year 2005, the teen birth *rate was 18.4 compared to 28.1 in 1996.³
- In the year 2005, the teen induced **abortion rate was 15.9 compared to 20.2 in 2000.³
- From 1998 to 2003, the pregnancy *rate for youth 10-17 years of age declined from 11.2 to 7.8.²

^{*}These are the most current data available. Data may differ from previously published data due to differences in definitions.

^{*}Rate - reflects the number per 1,000 population.

^{**}Does not consider spontaneous abortions.

Canada

- In Canada, the pregnancy *rate for 15-19 year olds in 2003 was 32.1.⁴ The teen pregnancy rate has steadily declined since 1994 (48.8).^{5,6}
- In 2003 the birth rate for teens 15-19 years old was 14.4.⁷ The live birth rate has been decreasing since 1994 (24.8).^{4,5}
- In 2003 the induced **abortion rate for teens aged 15-19 was 17.1.⁸ The abortion rate has gradually declined since 1996 (21.7).^{4,5}

Summary

Adolescent Pregnancy, Birth and Abortion Rate Comparisons: Calgary (2002), Alberta (2005) and Canada (2003)

	Calgary¹	Alberta³	Canada^{4,7,8}
Pregnancy *Rate	36.8	37.6	32.1
Birth *Rate	13.5	18.4	14.4
**Abortion Rate	23.3	15.9	17.1

CONSEQUENCES OF TEEN PREGNANCY

Socioeconomic Factors

- Teen parenthood is associated with school drop out. With less education, the teen mother and/or father may lack job skills. As a result, teen parents and their children often experience poor economic and social outcomes.⁹
- Teen mothers are at increased risk for single parenthood.¹⁰ Single parent teen mothers have an increased risk of low income and depression, both of which threaten a secure and healthy parent child attachment.⁹

Health Risks

- Infants of teen mothers are at risk for premature birth and low birth weight putting them at risk for illness and/or death.¹¹
- During the years 2003-2005 (combined), Albertan mothers less than 20 years of age had the highest smoking during pregnancy rate compared to all other age groups. In fact, over half of teen mothers smoked during pregnancy.³ Tobacco use during pregnancy is associated with low birth weight, preterm birth and sudden infant death syndrome.³
- During the years 2003-2005 (combined), mothers in Alberta less than 20 years of age had the highest alcohol consumption rate (11%) and street drug use rate (10%) compared to all other age groups.³ Alcohol consumption during pregnancy can cause fetal alcohol spectrum disorder. The use of street drugs is related to continuous legal, social and health problems for both the mother and her child.³
- During the years 2003-2005 (combined), mothers in Alberta under the age of 20 had the second highest rate of stillborn births compared to all other age groups.³

*rate - reflects the number per 1,000 population.

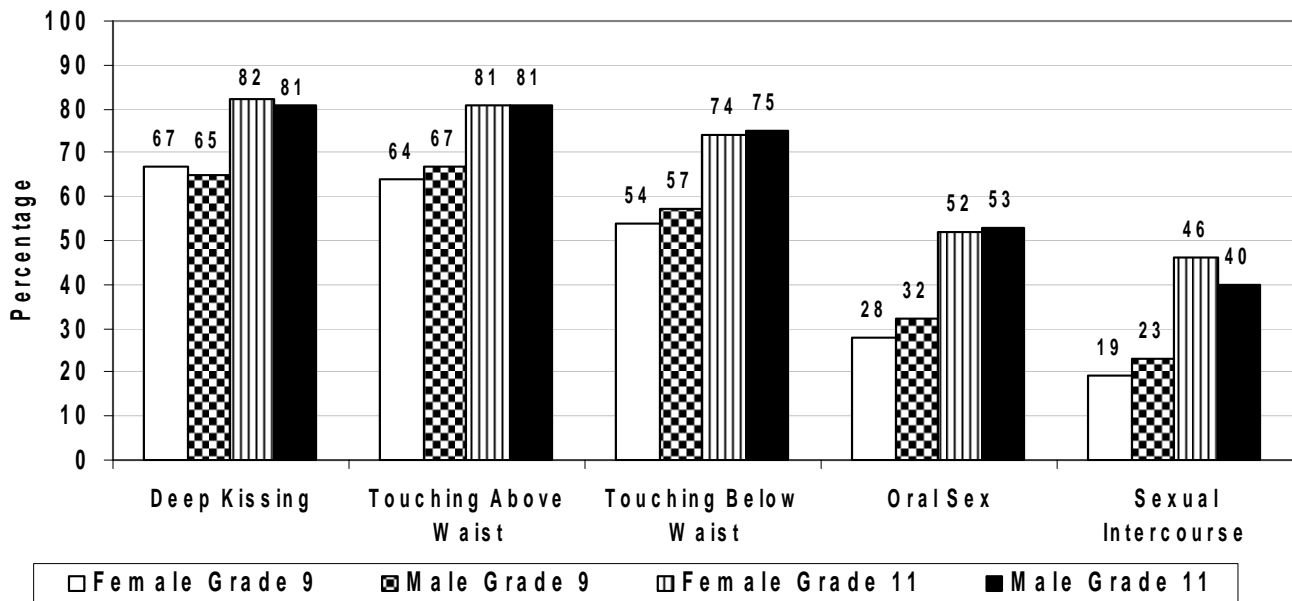
**Doesn't consider spontaneous abortion.

ADOLESCENT SEXUALITY AND INFLUENCES ON DECISION MAKING

Sexual Activity

- In 2000, a national survey revealed that nearly half of Canadian youth aged 15-19 are sexually active.¹²
- A Canadian study revealed 19% of grade 9 females and 23% of grade 9 males had sexual intercourse at least once in 2002 compared to 21% of grade 9 females and 31% of grade 9 males in 1989.¹³
- A Canadian study determined that in 2002, 46% of grade 11 females had sexual intercourse at least once. The percentage was the same in 1989.¹³ The same study indicated 40% of grade 11 males had sexual intercourse at least once in 2002 compared to 49% in 1989.¹³

Adolescent Participation in Sexual Activity At Least Once (2002)¹³



Alcohol and Drug Influences

- The use of alcohol and drugs reduces decision-making abilities required to say no to sexual intercourse or to practice safer sex.
- An Albertan student survey conducted in 2005 indicated 38.2% of students in grades 7-9 and 76.9% of students in grades 10-12, used alcohol in the last year.¹⁴ Thirty-one per cent of all students reported binge drinking and 33.2% of students reported alcohol abuse in the past year.¹⁴
- A 2005 survey of Albertan students indicated 26.7% of students in grades 7-12, used marijuana in the last year. The same survey revealed 25.4% of youth in grades 7-12, used illicit drugs (excluding marijuana) in the last year.¹⁴
- A Canadian study indicated 39% of grade 9 males and 28% of grade 9 females used alcohol or drugs prior to their last sexual intercourse compared to 38% of grade 11 males and 21% of grade 11 females.¹³
- Adolescents who drink alcohol or use drugs before engaging in sexual intercourse are less likely to use protection such as condoms and therefore increase their risk of pregnancy or developing STI or HIV.¹³

Reducing the Risk of Pregnancy

- Besides abstinence, hormonal methods of contraception (e.g., birth control pill, birth control patch, vaginal contraceptive ring) are the most effective methods for preventing pregnancy when used consistently and correctly.¹⁵ When hormonal contraceptive methods are used to prevent pregnancy, a male or female condom should also be used to protect against STI and HIV. Studies have shown that females who use hormonal contraceptives do not necessarily consider using a condom for STI and HIV prevention.¹⁶
- “The Morning After Pill” or Emergency Contraception (EC) can be taken to prevent pregnancy up to 5 days after unprotected intercourse or a contraceptive accident (e.g., broken condom), although *it is most effective if taken within 24 hours*. Teens can access a prescription for EC at a family planning clinic, a walk-in clinic, or through their family doctor. In Alberta, EC is now available through most pharmacies without a prescription.

The Benefits of Sexuality Education

- Effective sexual health education provides opportunities for individuals to explore the attitudes, feelings, values and moral perspectives that may influence their choices regarding sexual health.¹⁷
- The majority of Canadian parents and students strongly support school-based sexual health education, and ultimately believe sexual health education is the shared responsibility of schools and parents.^{18,19}
- In the *Netherlands* (one of the countries with the lowest adolescent pregnancy rate), interventions that have helped to decrease adolescent pregnancy include easier access to birth control, candid dialogue about sexuality in the mass media, sexuality education programs, and active participation of teens and parents in these programs.²⁰
- Evaluations of *comprehensive sexual health education programs* (full information at appropriate ages) revealed that they result in postponement of first sexual intercourse, decreases in the number of partners, and significant increases in condom use.¹⁶ Evaluations of *abstinence only programs* indicated they are **ineffective** at delaying intercourse, preventing pregnancy, and preventing STI.²¹
- Research indicates that parent-child communication about sexuality can have a positive influence upon adolescent sexual behavior.²² Unfortunately, parents and their children often have difficulty discussing sexuality with each another. In a 2006 Canadian study of mothers and teenagers, 63% of teens aged 14-17 considered parents an important source of sexuality information, 43% felt parents were the most useful and valuable sources of information, and 38% had never had conversations about sexuality with their mothers. Mothers underestimated the importance of their role as sources of sexuality information. Only 18% felt that their adolescents perceived them as a source of information.²³
- For teens, there is a hierarchy of preferred sexual behavior. Abstinence from sexual activity for teenagers is preferred because of health consequences that may affect the individual. Postponement of initial sexual activity, adherence to one sexual partner, and protected sexual intercourse are sequentially offered as the next best alternatives.²⁴

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SEXUALLY TRANSMITTED INFECTIONS (STI), HIV & AIDS

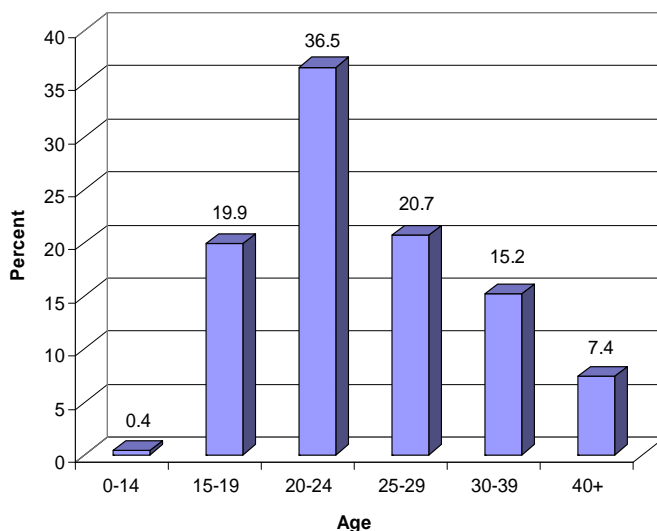
STI STATISTICS

In Alberta, the following STI are reported to the provincial health officer: syphilis, chlamydia, gonorrhea, nongonococcal urethritis (NGU), and mucopurulent cervicitis (MPC).¹ Herpes and human papillomavirus (HPV/ genital warts) are non-reportable STI. Herpes and HPV are viral infections that spread through skin to skin genital contact. HPV is the main cause of cervical changes detected by Pap tests. If cervical changes are not detected early, they may go on to become cervical cancer.^{2,3}

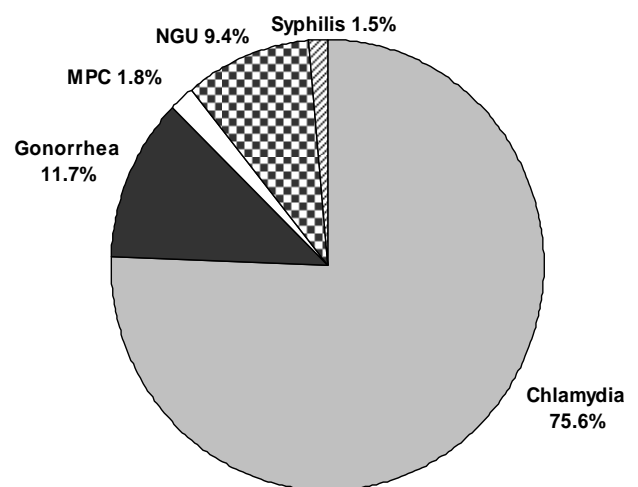
Calgary Region

- In 2006, approximately 20% of all STI reported in the Calgary Region were reported among teens aged 15-19 and approximately 56% of all STI were reported among youth aged 15-24.⁴
- In 2006, 1057 individuals aged 15-19 were diagnosed with an STI, compared with 644 in 2000.⁴
- *Chlamydia* is the most commonly reported STI in 15-19 year olds with the numbers rising. In 2006, there were 885 chlamydia cases compared to 515 in 2000.⁴ *Gonorrhea* is also on the rise. In 2006, there were 102 cases among youth ages 15-19 compared to 15 cases in 2000.
- The chlamydia [☆]rate for all ages increased from 193.5 in 2000 to 248.8 in 2005.⁴
- The gonorrhea [☆]rate for all ages increased from 16.2 in 2000 to 33.1 in 2005.⁴
- The infectious syphilis [☆]rate for all ages decreased from 1.5 in 2004 to 1.2 in 2005.⁴ However, the Calgary Region experienced an outbreak of syphilis in 2006, and the infectious syphilis rate escalated to 5.1.⁵
- The NGU [☆]rate for all ages decreased from 72.7 in 2002 to 34.4 in 2005.⁴
- The MPC [☆]rate for all ages decreased from 28.9 in 2002 to 7.9 in 2005.⁴

Age Distribution of Reported Calgary STI Cases 2006⁴



Breakdown of Reported STI Cases in Calgary 2006⁴



Alberta

- In Alberta, the chlamydia [☆]rate for all ages escalated from 178.7 in 1998 to 260.2 in 2004.⁶ From 2000-2004, approximately 27% of all chlamydia cases were in individuals aged 15-19, and 69% of cases were in individuals aged 15-24.⁷

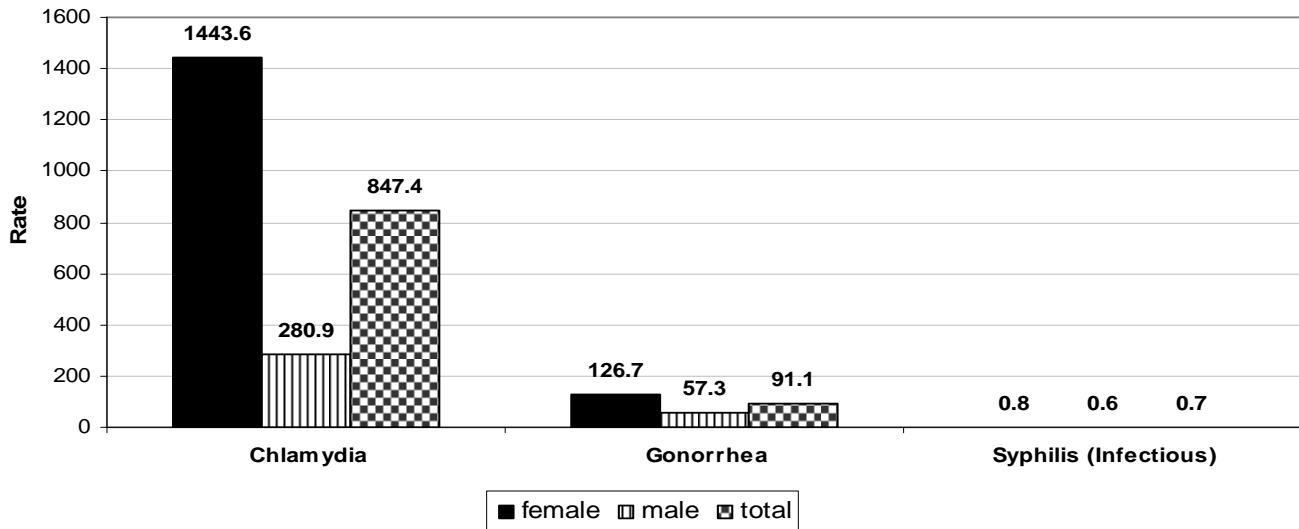
[☆]rate - reflects the number per 100,000 population

- The gonorrhoea [☆]rate for all ages rose from 17.8 in 1999 to 42.9 in 2004.⁶ From 2000-2004, approximately 21% of all gonorrhoea cases were in individuals under the age of 20, and 50% of cases were in individuals under the age of 25.⁷
- The infectious syphilis [☆]rate for all ages increased from 0.4 in 2002 to 2.3 in 2004.⁶ From 2000-2004, approximately 9% of all infectious syphilis cases were in individuals aged 15-19, and 29% of all infectious syphilis cases were in individuals under the age of 25.⁷

Canada

- Chlamydia is the most commonly reported STI for Canadian teens, 15-19 years old. The chlamydia [☆]rate for teens steadily escalated from 546.7 in 1997 to 847.4 in 2004.⁶ The chlamydia [☆]rate for all ages increased from 113.9 in 1997 to 197.1 in 2004.⁶
- The gonorrhoea [☆]rate for 15-19 year olds steadily increased from 51.7 in 1997 to 91.1 in 2004.⁶ The gonorrhoea [☆]rate for all age groups rose from 14.9 in 1997 to 28.9 in 2004.⁶
- The infectious syphilis [☆]rate for adolescents ages 15-19 decreased from 0.9 in 2003 to 0.7 in 2004.⁶ The infectious syphilis [☆]rate for all ages increased steadily from 0.4 in 1997 to 3.5 in 2004.⁶

2004 Canadian Chlamydia, Gonorrhoea, and Syphilis [☆]Rates for Youth Ages 15-19: Male, Female, Total⁶



Summary

Chlamydia, Gonorrhoea, and Syphilis [☆]Rate Comparisons (all ages): Calgary (2005), Alberta (2004) and Canada (2004)

	Calgary ⁴	Alberta ⁶	Canada ⁶
Chlamydia [☆] Rate	248.8	260.2	197.1
Gonorrhoea [☆] Rate	33.1	42.9	28.9
Infectious Syphilis [☆] Rate	1.2	2.3	3.5

[☆]rate - reflects the number per 100,000 population

HIV AND AIDS STATISTICS

Although infection with HIV (human immunodeficiency virus) can be transmitted sexually, it is reported separately from other STI.

Calgary Region

- In 2006, there were 76 persons (in all age groups) in the Calgary Region newly diagnosed with HIV.⁸

Alberta

- In the year 2006, there were 218 newly reported HIV cases (in all age groups) in Alberta. The HIV [☆]rate for all ages was 6.9 in 2006 compared to 5.4 in 2005.⁸
- From 1998-2006, 26 individuals between the ages of 15 and 19 tested positive for HIV.⁸
- In 2006, 67% of all newly diagnosed HIV cases were in males.⁸
- In 2006, heterosexual exposure was responsible for 47% of all newly diagnosed cases of HIV.⁸
- In the year 2006, of all newly diagnosed HIV cases, 22.9% were Aboriginal, 25.2% were Black, and 38.1% were White.⁸
- In 2006, there were 53 HIV positive individuals that developed AIDS.⁸

Canada

- HIV testing became available in November 1985. From November 1985-June 2006, a total of 61,423 positive HIV tests were reported in Canada. Of these, 844 (1.4%) were among youth aged 15-19 years.⁹
- As of June 2006, a total of 20,493 AIDS cases were reported. Of these, 308 (1.5%) were among individuals less than 20 years old; 3,164 (15.4%) were among individuals between the ages of 20-29; and 17,039 (83.1%) were among individuals over the age of 30.⁹
- In Canada, males are five times more likely than females to be HIV positive.⁹

CONSEQUENCES OF STI, HIV & AIDS

- The high incidence of chlamydia has become a national public health concern. Studies show that having an STI such as chlamydia increases the transmission and acquisition of HIV infection.⁶
- It is estimated that 50-75% of those infected with chlamydia, do not show any symptoms.¹
- In women, untreated STI such as gonorrhea and chlamydia, can lead to pelvic inflammatory disease (PID), which is an inflammation of the internal female reproductive organs. PID may lead to chronic pelvic pain, ectopic pregnancy, or infertility. About 75-85% of PID cases are a result of untreated STI.¹
- Untreated STI such as gonorrhea and chlamydia can put young men at risk of urinary tract and testicular infections.¹⁰
- STI such as gonorrhea and chlamydia can be passed from mother to child during birth causing neonatal eye infections, blindness, and pneumonia.¹⁰
- HPV is probably the most common STI in Canada. It is estimated that roughly 70% of adults will have at least one type of HPV infection during their lifetime. Many people infected with HPV have no symptoms.¹⁰ There are over 100 strains of HPV.⁶ Certain strains cause genital warts whereas others cause abnormal cell growth on the cervix, which may lead to cervical cancer if left untreated.¹⁰

RISK FACTORS FOR STI, HIV & AIDS

Several factors place an individual at risk for contracting STI and/or HIV & AIDS including:^{6, 10, 11, 12}

- Participation in unprotected vaginal, oral or anal sex (no condom used).
- Involvement in street culture.
- Previous history of STI.
- Having multiple sexual partners.
- Use of non-barrier contraceptives, such as the birth control pill, without using a male or female condom.
- Use of injection drugs, alcohol or other substances that can impair decision making ability.

PREVENTION OF STI, HIV & AIDS

- Teens should consider or re-consider **abstinence** - not having vaginal, anal, or oral intercourse but showing affection for one another in other ways.¹²
- Condoms and/ or dental dams provide **good** protection against HIV, chlamydia, gonorrhea, herpes and HPV.¹² (Dental dams are square pieces of latex, which is similar to the material condoms are made from. They are used to cover the vulva or anus during oral sex to lower the risk of STI.)
- It is recommended that teens use a **male/female condom and/or dental dam** every time they have sexual contact (e.g., vaginal, anal, or oral sex; and genital to genital contact). The most common causes of condom failure are that they are *not* used consistently (e.g. with every act of intercourse) or correctly. Misuse of condoms account for condom breakage or slippage.¹²
- Teens should limit sexual activity to a partner they are sure has **tested negative** for STI and HIV.¹²
- In 2006, Health Canada approved a vaccine to protect against 4 different strains of HPV. The vaccine is approved for use in females aged 9-26.¹³

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