

GET THE FACTS ON...

Teen Pregnancy, Sexually Transmitted Infections (STI), HIV and AIDS, and Teen Sexuality

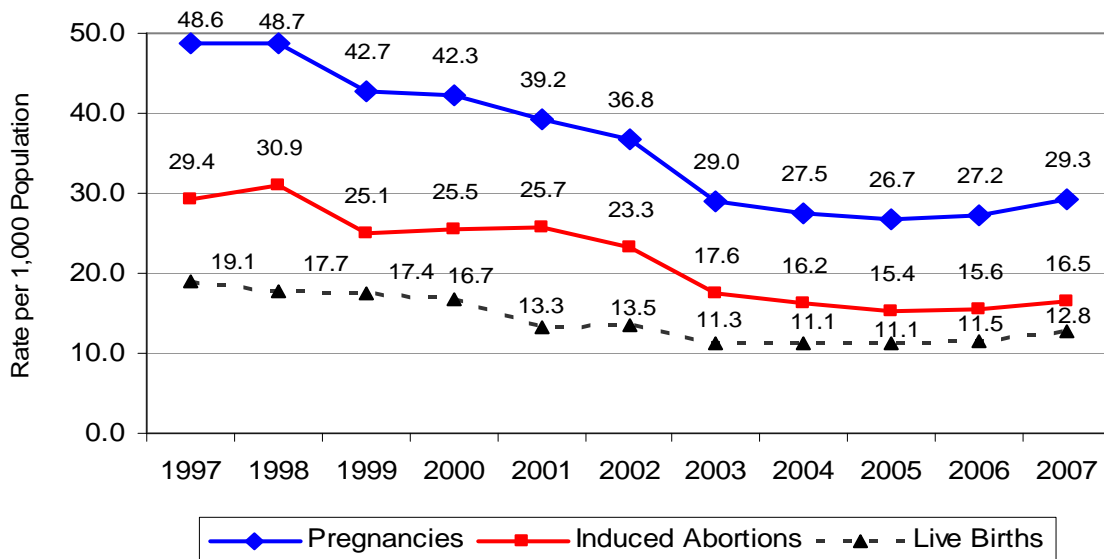
TEEN PREGNANCY

TEEN PREGNANCY STATISTICS

Calgary Area¹

- From 1998 to 2005, the estimated pregnancy rate² for teens aged 15-19 in the Calgary area steadily declined from 48.7 to 26.7. The pregnancy rate increased from 26.7 in 2005 to 29.3 in 2007 (Data Integration, Measurement & Reporting - Alberta Health Services, 2009; Performance Reporting – Calgary Health Region, 2005).
- In 2007, the estimated pregnancy rate for teens 15-17 years of age was 15.3. The pregnancy rate for teens aged 18-19 was 50.4 (Data Integration, Measurement & Reporting - Alberta Health Services, 2009).
- In the year 2007, the live birth rate for teens 15-19 was 12.8 compared to 19.1 in 1997 (Data Integration, Measurement & Reporting - Alberta Health Services, 2009).
- In 2007, the induced abortion rate for teens ages 15-19 was 16.5 compared to 30.9 in 1998 (Data Integration, Measurement & Reporting - Alberta Health Services, 2009; Performance Reporting – Calgary Health Region, 2005).
- Figure 1 summarizes the teen pregnancy, abortion, and live birth rates over the past decade.

Figure 1. Pregnancy Rates² among 15 to 19 Year Olds in the Calgary Area: 1997-2007¹



¹Data may differ from other published information due to differences in definitions and sources. Data source for 1997-2002 data was Vital Statistics data, Alberta Registry population figures, Physician Claims File. The data source for 2003-2007 data was Government of Alberta – Health and Wellness Interactive Health Data Application, Alberta Morbidity Inpatient Data Base and Ambulatory Data Base. The pregnancy rate includes live births, still births and induced abortions.

²Rate - reflects the number per 1,000 population.

Alberta

- From 1998 to 2004 the estimated pregnancy rate² for Alberta teens aged 15-19 declined from 53.0 to 38.8. The pregnancy rate increased from 38.8 in 2005 to 41.0 in 2007 (Reproductive Health Working Group, 2009).
- In 2007, the estimated pregnancy rate for teens 15-17 years old was 22.7. The pregnancy rate for teens aged 18-19 was 68.3 (Reproductive Health Working Group, 2009).
- From 1998 to 2004, the teen birth rate decreased from 25.4 to 18.1. The birth rate increased from 18.1 in 2004 to 20.6 in 2007 (Reproductive Health Working Group, 2009).
- From 1998 to 2005, the teen induced abortion rate decreased from 23.1 to 16.9. The abortion rate increased from 16.9 in 2005 to 17.6 in 2007 (Reproductive Health Working Group, 2009).

Canada

- In Canada, the pregnancy rate² for 15-19 year olds in 2005 was 29.2. The teen pregnancy rate has steadily declined since 1994 (48.8) (Statistics Canada, 2008a; 2008b).
- In 2005, the estimated pregnancy rate for teens 15-17 years of age was 15.8. The pregnancy rate for teens aged 18-19 was 49.0 (Statistics Canada, 2008a).
- In 2005 the birth rate for teens 15-19 years old was 13.3. The live birth rate has been decreasing since 1994 (24.8) (Statistics Canada, 2008a; 2008b).
- In 2005 the induced abortion rate for teens aged 15-19 was 15.3. The abortion rate has gradually declined since 1996 (21.7) (Statistics Canada, 2008a; 2008b).

Summary³

- Table 1 summarizes the adolescent pregnancy, birth, and abortion rates² for Calgary (2007), Alberta (2007), and Canada (2005).

**Table 1. Adolescent Pregnancy, Birth and Abortion Rate Comparisons:
Calgary (2007), Alberta (2007) and Canada (2005)**

| | | Calgary | Alberta | Canada |
|------------------------------|-------------|----------------|----------------|---------------|
| Pregnancy Rate | 15-19 years | 29.3 | 41.0 | 29.2 |
| | 15-17 years | 15.3 | 22.7 | 15.8 |
| | 18-19 years | 50.4 | 68.3 | 49.0 |
| Live Birth Rate | 15-19 years | 12.8 | 20.6 | 13.3 |
| Induced Abortion Rate | 15-19 years | 16.5 | 17.6 | 15.3 |

²Rate - reflects the number per 1,000 population.

³It is important to note that the estimated pregnancy rates are defined differently among the sources used. For example, the Calgary data uses live births, induced abortions and still births to comprise the estimated pregnancy rate (Data Integration, Measurement & Reporting - Alberta Health Services, 2009). The Alberta data uses live births, induced abortions, stillbirths and spontaneous abortions treated by physicians (Reproductive Health Working Group, 2009). Finally, the Canada data uses live births, induced abortions, spontaneous abortions, illegal abortions and stillbirths (Statistics Canada, 2008a).

CONSEQUENCES OF TEEN PREGNANCY

Socioeconomic Factors

- Teen motherhood is associated with incompleteness of high school or post-secondary education (Luong, 2008). With less education, the teen mother may lack job skills. As a result, teen mothers and their children often experience poor economic outcomes (Bushnik & Garner, 2008).
- Teen mothers are at increased risk for single parenthood (Bushnik & Garner, 2008). Single parent teen mothers have an increased risk of low income and depression, both of which threaten a secure and healthy parent child attachment (Health Canada, 1999).

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 (Public Health Agency of Canada [PHAC], 2008a).
- During the years 2004-2006 (combined), Albertan mothers less than 20 years of age had the highest smoking during pregnancy rate compared to all other age groups. In fact, almost half of teen mothers smoked during pregnancy (Reproductive Health Working Group, 2009). Tobacco use during pregnancy is associated with low birth weight, preterm birth and sudden infant death syndrome (Reproductive Health Working Group, 2009).
- During the years 2004-2006 (combined), mothers in Alberta less than 20 years of age had the highest alcohol consumption rate (8.2%) and street drug use rate (5.2%) compared to all other age groups (Reproductive Health Working Group, 2009). Alcohol consumption during pregnancy can cause fetal alcohol spectrum disorder, which can result in permanent mental, behavioral, learning and physical disabilities. The use of street drugs is related to social and health problems for both the mother and her child (Reproductive Health Working Group, 2009).

PREGNANCY PREVENTION

- Teens should be encouraged to consider or re-consider abstinence. When trying to avoid pregnancy, abstinence means abstaining from penis in vagina intercourse (Kowal, 2008).
- 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 (Trussell, 2008). 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 using hormonal contraceptives do not necessarily use a condom (Rotermann, 2008) for STI and HIV prevention.
- Emergency Contraception (EC) can be taken to prevent pregnancy up to 5 days after unprotected intercourse or contraceptive failure (e.g., broken condom), although *it is most effective if taken within 24 hours* (Stewart, Trussell, & Van Look, 2008). Teens can access a prescription for EC at a sexual and reproductive health clinic, a walk-in clinic, or through their family doctor. In Alberta, EC is now available through most pharmacies without a prescription.
- Refer to page 11 for the benefits of sexual health education.

SEXUALLY TRANSMITTED INFECTIONS (STI), HIV and AIDS

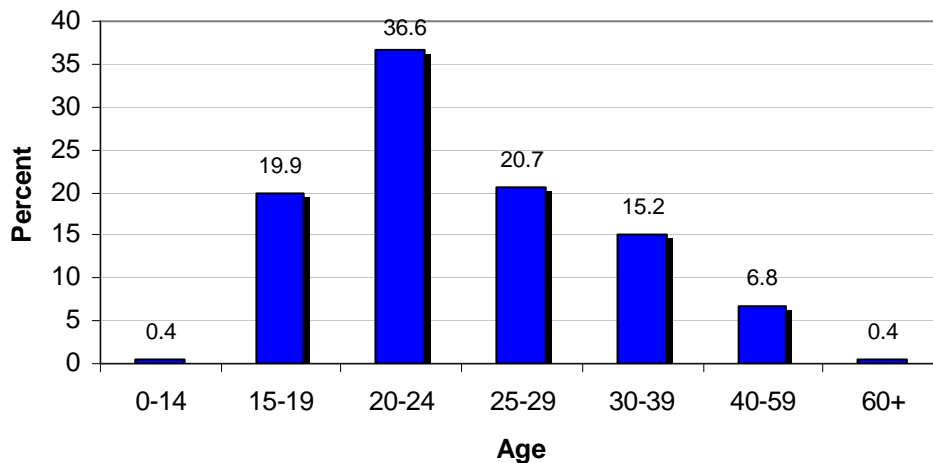
STI STATISTICS

In Alberta, sexually transmitted infections (STI) such as syphilis, chlamydia, and gonorrhea are reported to Alberta Health and Wellness (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008). 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 (PHAC, 2008b).

Calgary Area

- In 2006, nearly 20% of all STI reported in the Calgary Region were reported among teens aged 15-19 and over 56% of all STI were reported among youth aged 15-24 (Calgary Health Region, 2007).
- See Figure 2 for the age distribution of reported Calgary STI cases (2006).

Figure 2. Age Distribution of Reported Calgary STI Cases 2006

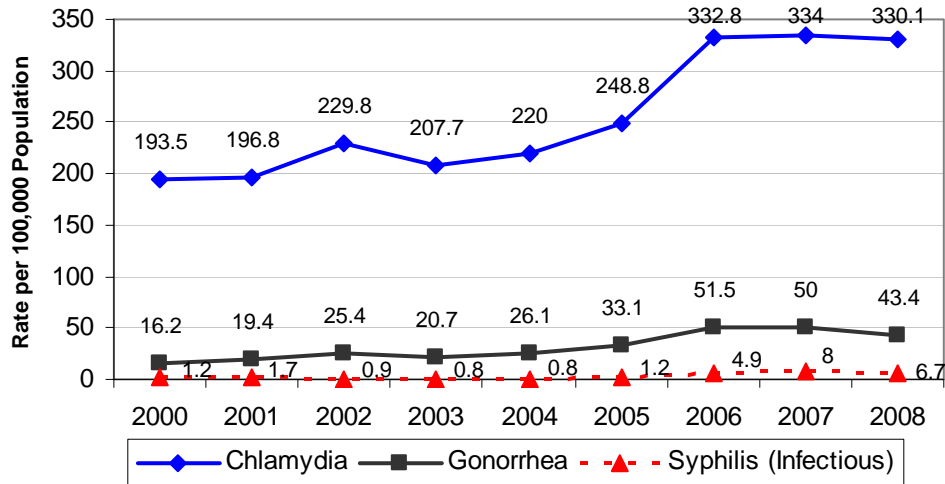


(Calgary Health Region, 2007)

- **Chlamydia** is the most commonly reported STI in the Calgary area. The chlamydia rate⁴ for all ages increased from 193.5 in 2000 to 334.0 in 2007 (Alberta Health Services, 2010; Calgary Health Region, 2007). The rate decreased slightly from 334.0 in 2007 to 330.1 in 2008 (Alberta Health and Wellness, 2010).
- The **gonorrhea** rate for all ages increased from 20.7 in 2003 to 51.7 in 2006. The gonorrhea rate declined from 51.7 in 2006 to 43.4 in 2008 (Alberta Health Services, 2010; Calgary Health Region, 2007; Alberta Health and Wellness, 2010).
- The **infectious syphilis** rate for all ages decreased from 1.7 in 2001 to 0.8 in 2004. The rate escalated from 1.2 in 2005 to 8.0 in 2007, due to an outbreak in the Calgary area (Alberta Health Services, 2010; Calgary Health Region, 2007). The rate declined from 8.0 in 2007 to 6.7 in 2008 (Alberta Health and Wellness, 2010).
- See Figure 3 for chlamydia, gonorrhea and infectious syphilis rates⁴ (all ages) for the Calgary area (2000-2008).

⁴rate - reflects the number per 100,000 population

Figure 3. Chlamydia, Gonorrhoea and Infectious Syphilis Rates (All Ages) for the Calgary Area: 2000-2008



(Alberta Health Services, 2010; Alberta Health and Wellness, 2010; Calgary Health Region, 2007)

Alberta

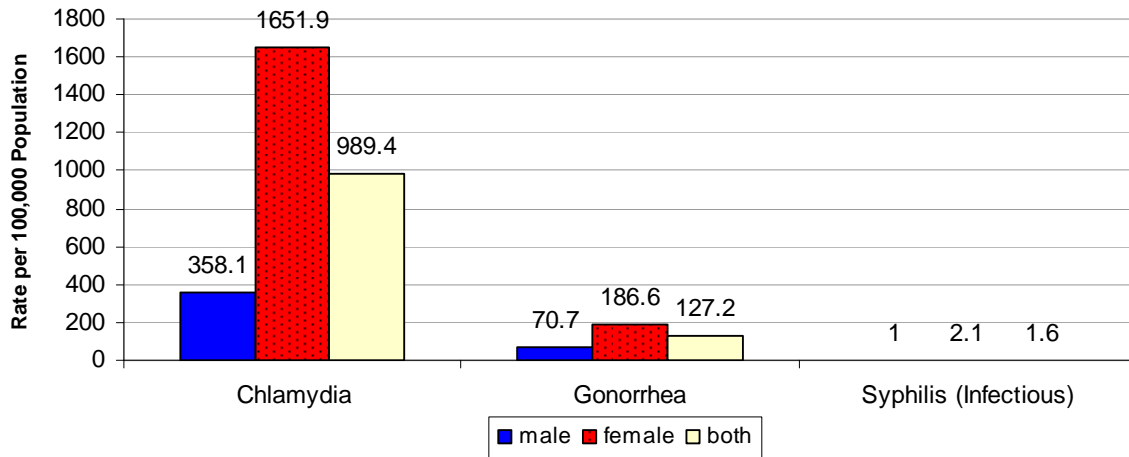
- In Alberta, the **chlamydia** rate⁴ for all ages escalated from 184.1 in 1998 to 344.7 in 2008 (Alberta Health and Wellness, 2008; 2010). In 2008, approximately 26% of all chlamydia cases were in individuals aged 15-19, and 65% of cases were in individuals aged 15-24 (Alberta Health and Wellness, 2010).
- The **gonorrhoea** rate for all ages rose from 18.4 in 1999 to 64.4 in 2007 (Alberta Health and Wellness, 2008). The rate declined to 60.8 in 2008 (Alberta Health and Wellness, 2010). In 2008, approximately 21% of all gonorrhoea cases were in individuals 15-19 years old, and 51% of cases were in individuals 15-24 (Alberta Health and Wellness, 2010).
- **Infectious syphilis** was close to being eliminated, but has resurfaced. The infectious syphilis rate for all ages increased from 0.1 in 1999 to 7.3 in 2007. The rate declined slightly to 7.0 in 2008 (Alberta Health and Wellness, 2008; 2010). In 2008, nearly 6% of all infectious syphilis cases were in individuals aged 15-19, and approximately 23% of all infectious syphilis cases were in individuals 15-24 (Alberta Health and Wellness, 2010).

Canada

- **Chlamydia** is the most commonly reported STI for Canadian teens, 15-19 years old. The chlamydia rate⁴ for teens steadily escalated from 546.7 in 1997 to 989.4 in 2008. The chlamydia rate for all ages increased from 113.9 in 1997 to 248.9 in 2008 (PHAC, 2010a).
- The gonorrhoea rate for 15-19 year olds steadily increased from 51.7 in 1997 to 127.2 in 2008. The **gonorrhoea** rate for all age groups rose from 14.9 in 1997 to 38.2 in 2008 (PHAC, 2010b).
- The **infectious syphilis** rate for adolescents ages 15-19 increased from 1.1 in 2006 to 1.6 in 2008. The infectious syphilis rate for all ages increased from 0.4 in 1997 to 4.2 in 2008 (PHAC, 2010c).
- See Figure 4 for the Canada chlamydia, gonorrhoea and syphilis rates for teens ages 15-19 (2008).

⁴rate - reflects the number per 100,000 population

Figure 4. Canada Chlamydia, Gonorrhoea, and Syphilis Rates⁴ (2008) for Teens Ages 15-19: Male, Female, Both



(PHAC, 2010a; 2010b; 2010c)

Summary

- Table 2 summarizes the chlamydia, gonorrhoea and syphilis rates⁴ for Calgary, Alberta and Canada.

Table 2. Chlamydia, Gonorrhoea, and Syphilis Rate Comparisons: Calgary, Alberta, and Canada (2008)

| | | Calgary | Alberta | Canada |
|---------------------------------|--------------------|------------------|---------|--------|
| Chlamydia Rate | All Ages | 330.1 | 344.7 | 248.9 |
| | 15-19 years | Data unavailable | 1275.9 | 989.4 |
| | 20-24 years | Data unavailable | 1816.3 | 1342.7 |
| Gonorrhoea Rate | All Ages | 43.4 | 60.8 | 38.2 |
| | 15-19 years | Data unavailable | 182.2 | 127.2 |
| | 20-24 years | Data unavailable | 248.3 | 166.0 |
| Infectious Syphilis Rate | All Ages | 6.7 | 7.0 | 4.2 |
| | 15-19 years | Data unavailable | 5.7 | 1.6 |
| | 20-24 years | Data unavailable | 16.7 | 6.3 |

HIV AND AIDS STATISTICS

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

Calgary Area

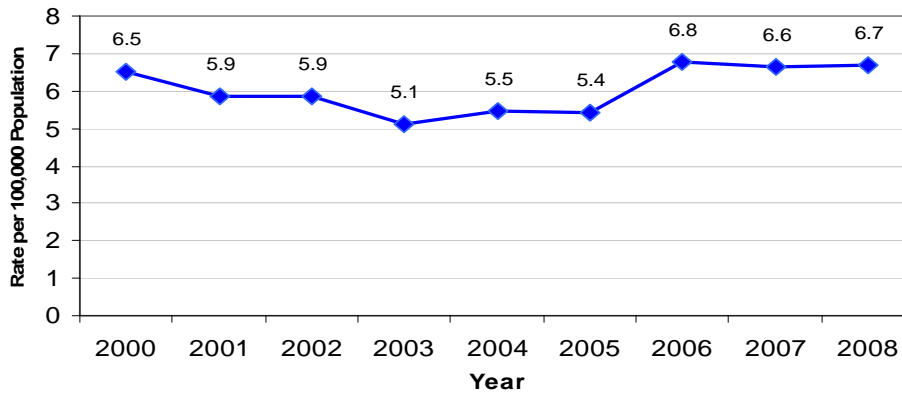
- In 2008, there were 106 persons (in all age groups) in the Calgary area newly diagnosed with HIV (Alberta Health and Wellness, 2009).
- In 2008, the HIV rate⁴ of newly reported cases in Calgary was 8.2 compared to 7.9 in 2007.

⁴rate - reflects the number per 100,000 population

Alberta

- In the year 2008, there were 234 newly reported HIV cases (in all age groups) in Alberta. The HIV rate⁴ for all ages was 6.7 in 2008 compared to 5.1 in 2003 (Alberta Health and Wellness, 2009).
- See Figure 5 for Alberta HIV rates (all ages) of newly reported cases from 2000-2008.

Figure 5. Alberta HIV Rates (All Ages) of Newly Reported Cases: 2000 – 2008



(Alberta Health and Wellness, 2009)

- In 2008, nearly two-thirds of newly diagnosed HIV cases were in males.
- Approximately 10 individuals under the age of 20 tested positive for HIV in 2008 (Alberta Health and Wellness, 2009).
- In 2008, heterosexual exposure was responsible for approximately 46% of all newly diagnosed cases of HIV (Alberta Health and Wellness, 2009).
- In the year 2008, of all newly diagnosed HIV cases, 17.5% were Aboriginal, 29.9% were Black, and 38.9% were White (Alberta Health and Wellness, 2009).
- In 2008, 53 HIV positive individuals developed AIDS (Alberta Health and Wellness, 2009).

Canada

- HIV testing became available in 1985. From 1985-December 2008, a total of 67,442 positive HIV tests were reported in Canada (PHAC, 2009). Of these, 973 (1.4%) were among youth aged 15-19 years (PHAC, 2009).
- There were 2,623 positive HIV tests reported in Canada in 2008 – 7 percent higher than the year previous (PHAC, 2009).
- In Canada, males are nearly five times more likely than females to be HIV positive (PHAC, 2009).
- As of December 2008, a total of 21,300 AIDS cases were reported. Of these, 320 (1.5%) were among individuals less than 20 years old; 3,287 (15.4%) were among individuals between the ages of 20-29; and 17,691 (83.1%) were among individuals over the age of 30 (PHAC, 2009).

CONSEQUENCES OF STI, HIV AND AIDS

- The high incidence of chlamydia has become a global public health concern. Each year, there are nearly 100 million new cases of chlamydia worldwide (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008).

⁴rate - reflects the number per 100,000 population

- Studies show that having an STI such as chlamydia increases the transmission and acquisition of HIV infection (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008).
- Approximately 70% of females and 50% of males infected with chlamydia, do not have any symptoms. As a result, chlamydia is under-diagnosed (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008).
- 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 chlamydia or gonorrhea infections that have spread to the reproductive organs (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008).
- Untreated STI such as gonorrhea and chlamydia can put young men at risk of testicular infections and in rare cases infertility (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008; PHAC, 2008b).
- STI such as gonorrhea and chlamydia can be passed from mother to child during birth causing eye infections, blindness, and pneumonia (Alberta Blood-borne Pathogens and Sexually Transmitted Infections Surveillance Working Group, 2008; PHAC, 2008b).
- 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. There are over 140 strains of HPV. Certain strains cause genital warts whereas others cause abnormal cell growth on the cervix, which may lead to cervical cancer if left untreated (PHAC, 2008b).

RISK FACTORS FOR STI, HIV AND AIDS

- *Several factors place an individual at risk for contracting STI and/or HIV including:*
 - Participation in unprotected vaginal, oral or anal sex (no condom or dental dam used) (PHAC, 2008b; Trussell, 2008; Warner & Steiner, 2008).
 - Genital to genital sexual contact (Kowal, 2008).
 - Involvement in street culture (Lokanc-Diluzio, Nelson, Wayne, & Hettler, in press; PHAC, 2008b).
 - Previous history of STI (PHAC, 2008b).
 - Having multiple sexual partners (PHAC, 2008b).
 - Use of non-barrier contraceptives, such as the birth control pill, without using a male or female condom (PHAC, 2008b).
 - Use of injection drugs, alcohol or other substances that can impair decision making ability (PHAC, 2008b).

PREVENTION OF STI, HIV AND AIDS

- Teens should be encouraged to consider or re-consider abstinence. When trying to avoid STI, abstinence means avoiding vaginal, anal, oral intercourse and other behaviors that expose a person to semen, pre-ejaculate fluid, cervical or vaginal secretions, and blood (Kowal, 2008).
- Male and female **condoms** reduce the risk of STI (e.g., chlamydia, gonorrhea, syphilis, HPV, etc.) and HIV (Trussell, 2008; Warner & Steiner, 2008).
- **Dental dams** are square pieces of latex, 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 or 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 (Warner & Steiner, 2008).

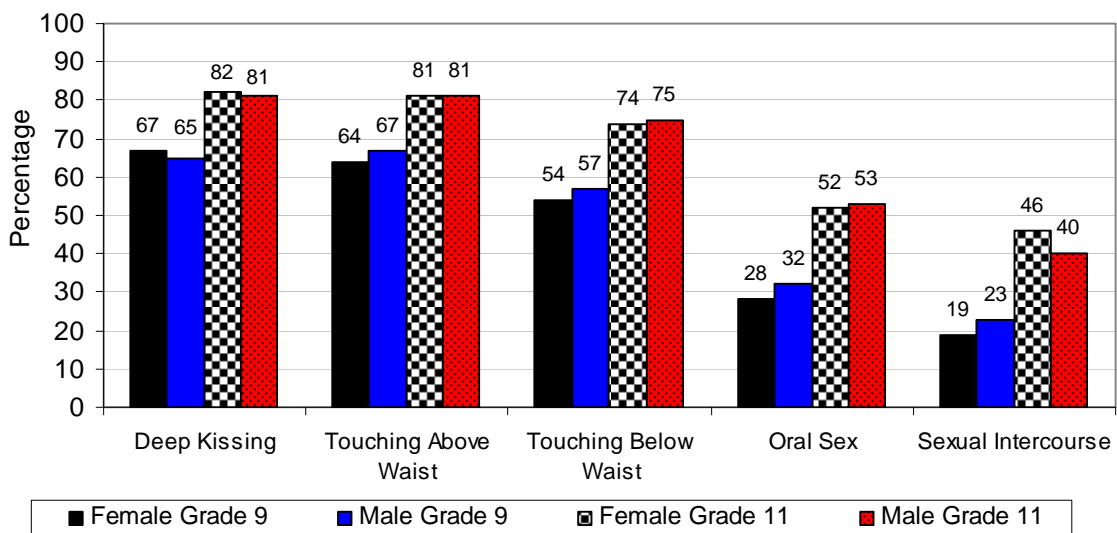
- Teens should limit sexual activity to a partner they are sure has **tested negative** for STI and HIV (PHAC, 2008b).
- Health Canada has approved the use of two vaccines (Gardasil and Cervarix) to protect against different strains of HPV. The vaccine is approved for use in females and males aged 9-26 (Picard, 2010; Society of Obstetricians and Gynecologists of Canada, 2009).
- Refer to page 11 for the benefits of sexual health education.

TEEN SEXUALITY

Sexual Activity

- In 2005, a national survey revealed that approximately 43% of Canadian teens aged 15-19 had sexual intercourse at least once compared to 47% in 1996/1997 (Rotermann, 2008). The study (2005 data) also revealed:
 - 29% of teens aged 15-17 and 65% of teens aged 18-19 had intercourse at least once;
 - 8% of those who had intercourse had done so prior to the age of 15;
 - 22% of those who had intercourse had done so at the age of 15 or 16; and
 - 33% of sexually active teens reported having sex with more than one partner, with males (40%) more likely to have multiple partners than females (27%) (Rotermann, 2008).
- A 2002 study (Boyce et al., 2003; Boyce et al., 2006) of Canadian school aged students determined
 - 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;
 - 46% of grade 11 females had sexual intercourse at least once in 2002, which was the same in 1989;
 - 40% of grade 11 males had sexual intercourse at least once in 2002 compared to 49% in 1989; and
 - over a quarter of grade nine students and over a half of grade 11 students participated in oral sex at least once.
- Figure 6 summarizes the results from Boyce and colleagues' (2003, 2006) research.

Figure 6. Adolescent Participation in Sexual Activity At Least Once (2002)



Condoms and Contraception

- Condoms can be used to prevent unwanted pregnancy and reduce the risk of spreading and contracting STI (Trussell, 2008; Warner & Steiner, 2008).
- A Canadian study revealed that 75% of teens aged 15-19 used condoms during their last sexual intercourse (Rotermann, 2008). The same study revealed:
 - 81% of teens aged 15-17 and 70% of teens aged 18-19 used condoms during their last intercourse;
 - 80% of males and 70% of females aged 15-19 used condoms during their last intercourse; and
 - the percentage of teens using condoms is higher in Alberta (82%) compared to the rest of Canada (75%) (Rotermann, 2008).
- In 2006, grade 9 and 10 sexually active Canadians were asked to specify the contraceptive method they used during their last sexual intercourse. The findings revealed that condoms are the contraceptive method of choice for both grades, and grade nine students were more likely to use contraception than grade 10 students (Boyce, King, & Roche, 2008). Table 1 summarizes the findings.

Table 3. Contraceptive Method Used for Sexually Active Grade 9 and 10 Canadians during their Last Sexual Intercourse (%)*

| Contraceptive Method | Grade 9 | | Grade 10 | |
|----------------------|---------|---------|----------|---------|
| | Males | Females | Males | Females |
| Condoms | 58 | 52 | 47 | 48 |
| Birth Control Pills | 26 | 36 | 25 | 33 |
| Withdrawal | 7 | 9 | 8 | 14 |
| Depo-Provera | 2 | 1 | 1 | 3 |
| Not Sure | 2 | 1 | 1 | 0 |
| Some Other method | 1 | 1 | 1 | 1 |
| No Method | 37 | 38 | 46 | 43 |

*Columns may exceed 100% as participants were able to choose more than one method.

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 2008 indicated 49.1% of students in grades 7-12 had used alcohol in the past year. Not surprisingly, alcohol consumption increased by grade. For example, 15.0% of students in grade 7 compared to 75.1% of students in grade 12, used alcohol in the last year. Of those students who consumed alcohol in the past year, almost 80% reported binge drinking, where they consumed five or more drinks on one occasion (Alberta Health Services-Addiction and Mental Health, 2009).
- A 2008 survey of Albertan students indicated 16.3% of students in grades 7-12, used marijuana in the last year. The same survey revealed 21.3% of youth in grades 7-12, used illicit drugs (excluding marijuana) in the last year (Alberta Health Services-Addiction and Mental Health, 2009).
- 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 (Boyce et al., 2003).
- 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 (Boyce et al., 2003).

The Benefits of Sexual Health Education

- Sexual health education “should be accessible to all people and ... it should be provided in an age appropriate, culturally sensitive manner that is respectful of an individual’s right to make informed choices about sexual and reproductive health” (Sex Information and Education Council of Canada [SIECCAN], 2009, pp. 47-48).
- 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 (PHAC, 2008c).
- The majority of Canadian parents and students strongly support school-based sexuality education, and ultimately believe sexual health education is the shared responsibility of schools and parents (Byers et al., 2001; Weaver et al., 2002).
- Evaluations of *comprehensive sexual health education programs* (full information at appropriate ages) revealed that they result in postponement of first sexual intercourse and increases in condom use. Evaluations of *abstinence only programs* indicated they are **ineffective** at delaying intercourse, preventing pregnancy, and preventing STI (SIECCAN, 2009).
- Research indicates that parent-child communication about sexuality can have a positive influence on teen sexual behavior (Short & Rosenthal, 2003). Unfortunately, parents and their children often have difficulty discussing sexuality with each another. In a 2005 Canadian study of mothers and teenagers, 63% of teens aged 14-17 considered parents a source of sexuality information while 43% felt parents were the most useful/valuable sources of information. That said 38% had never had conversations about sexuality with their mothers. When participants were asked what was lacking in their knowledge regarding sexual health, 25% identified "how to talk about sexual health issues with parents." In the same study, mothers underestimated their role in their teenager’s sexual health knowledge and behaviors (Frappier et al., 2008).
- 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 (Calgary Health Services, 1996; Sexuality Information and Education Counsel of the United States, 2008).

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Suggested Citation: Sexual & Reproductive Health – Alberta Health Services Calgary Zone. (2010). Get the facts on...teen pregnancy, sexually transmitted infections (STI), HIV & AIDS, and teen sexuality. Calgary: Author.