CHAPTER 19 – ADOLESCENT HEALTH

First Nations and Inuit Health Branch (FNIHB) Pediatric Clinical Practice Guidelines for Nurses in Primary Care.
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INTRODUCTION

Adolescence is a period of transition between childhood and adulthood and a time change developmentally, both physiologically and psychologically. Adolescents in our society face many health issues, particularly in the areas of mental, emotional and social health. Unfortunately, adolescence is also a period of life when there is little or no contact with health care professionals at a time when risk-taking behaviours, such as abuse of drugs and alcohol, predisposes them to premature morbidity and mortality. On the other hand, the changes of adolescence create opportunities to provide health promotion and illness prevention activities and interventions.\(^1\)

ADOLESCENT DEVELOPMENT

Requirements for healthy development:
- Supportive environment over the long term
- Graded steps toward autonomy

Other factors assisting in healthy development:
- Mutual positive engagement between adolescents and adults
- School and community programs

CHARACTERISTICS OF PSYCHOSOCIAL DEVELOPMENT\(^2\)


EARLY ADOLESCENCE\(^3\)

Approximately 12–14 years old.
- Preoccupation with body changes and image; self-conscious about appearance
- High expectations of self yet this alternates with lack of confidence
- Peer group becoming more influential; less affection shown for parents
- Searching for new people to love
- High levels of physical activity
- Many mood swings and impulsive
- Increased ability to think in a complex manner (for example, abstractly) and sense of right and wrong
- More able to express feelings verbally, but often expresses feelings by action
- Most interest is in present and near future
- Tests rules and limits

MID-adolescence\(^4\)

Approximately 15–17 years old.
- Greater desire for independence
- Self-conscious
- Peer group dominates social life; efforts to make new friends and select role models
- Less conflict with parents, but sadness due to realizing psychological “loss” of parents
- Increased ability to care and share so can develop more intimate relationships
- Risk behaviours more prevalent
- Sexuality is of great interest
- Improved work habits and sense of right and wrong (conscience)
- More concern about future plans and intellectual interests
- Unrealistically high expectations of self alternate with poor self-concept

LATE ADOLESCENCE

Approximately 18–21 years old.
- Identity more firm, including sense of humour, interests, emotional stability
- Able to compromise and develop useful insight
- Adult appearance, clear sexual identity
- More capable of orienting activities toward the future (setting goals and following through), of mutual caring (for example, verbally expressing feelings) and of internal control (for example, delayed gratification, thinking ideas through, making decisions, self-reliance, self-esteem)
- Uncertainties about sexuality, future relationships and work possibilities
- Pride in own work
- Accepts social institutions and cultural traditions
CHARACTERISTICS OF PHYSICAL DEVELOPMENT

FEMALE

In the female, puberty begins between the ages of 8 and 13 years and is usually complete within 3 years. In females, breasts start to develop first, then there is pubic hair growth and gains in weight and then height. Breast development may or may not be symmetrical. Menarche usually occurs about 2.5 years after the onset of puberty; in North America, the mean age at menarche is 12.5 years. Menses may take up to 2 years to become more regular. At menarche the adolescent female has generally attained 85% of her adult height. The female adolescent growth spurt usually occurs between Tanner stages II and IV (see Table 1, “Tanner Staging of Adolescent Development”). Normals for height, weight and body mass index values by age can be found on the WHO Child Growth Charts, which are available on the Rourke Baby Record website at: http://rourkebabyrecord.ca/growth.asp.

MALE

Puberty usually begins between age 10 and 15 for boys, and it takes twice as long as females. First the testicles, scrotum and penis enlarge, then hair develops in the genital and other body areas, and semen production starts. One may not know that semen production has started until an adolescent male has a “wet dream,” usually between ages 11 and 15. The male adolescent growth spurt occurs during Tanner stage V (see Table 1, “Tanner Staging of Adolescent Development”). Normals for height, weight and body mass index values by age can be found on the WHO Child Growth Charts, which are available on the Rourke Baby Record website at: http://rourkebabyrecord.ca/growth.asp.

SEXUAL MATURATION

Sexual maturation should be noted with reference to Tanner stages (see Table 1, “Tanner Staging of Adolescent Development”) or the Greig Health Record available at: http://www.cps.ca/english/statements/cp/PreventiveCare/GHRPage1.pdf. The Greig Health Record’s Sexual Maturity Rating tables include age ranges, but it should be noted that there are normal variations outside the ranges given.
### Table 1 – Tanner Staging of Adolescent Development

<table>
<thead>
<tr>
<th>Stage</th>
<th>Pubic Hair†</th>
<th>Testes and Penis in Male</th>
<th>Breast Development in Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (preadolescent)</td>
<td>No pubic hair present; some fine villous hair covers the genital area and is the same as the abdominal wall</td>
<td>Appearance of testes, scrotum and penis identical with that of early childhood</td>
<td>Juvenile breast with elevated papilla and small, flat areola</td>
</tr>
<tr>
<td>II</td>
<td>Sparse distribution of long, slightly pigmented, downy, straight or slightly curly hair at the base of the penis</td>
<td>Enlargement of testes and scrotum; reddish colouration and texture changes to scrotal skin; little enlargement of penis</td>
<td>Breast bud forms; papilla and breast elevates to form small mound; areola enlarges in diameter</td>
</tr>
<tr>
<td>III</td>
<td>Pigmentation and coarseness of pubic hair increases, and hair begins to curl and spread sparsely laterally and over pubis</td>
<td>Continued growth of testes in scrotum and continued lengthening of penis</td>
<td>Continued enlargement and elevation of breast and areola; no separation of breast contours</td>
</tr>
<tr>
<td>IV</td>
<td>Pubic hair is adult like; number of hairs continues to increase; adult distribution, but area covered is smaller and not on medial thighs</td>
<td>Testes and scrotum continue to grow; scrotal skin darkens; penis grows in width, and glans penis develops and widens</td>
<td>Papilla and areola separate from the contour of the breast to form a secondary mound</td>
</tr>
<tr>
<td>V</td>
<td>Mature pubic hair chains and adult distribution, with spread to surface of medial thighs</td>
<td>Mature adult size and shape of testes, scrotum and penis</td>
<td>Mature areolar mound recedes into general contour of breast, papilla continues to project</td>
</tr>
</tbody>
</table>


† Distribution and coarseness of pubic hair may differ according to ethnic background (for example, an Aboriginal adolescent may not have the same distribution of coarse hair as a Caucasian adolescent). 2011 update from: Hockenberry MJ, Wilson D. *Wong’s nursing care of infants and children.* Missouri: Mosby, Elsevier; 2007. Pages 816-17.

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**ADOLESCENT HEALTH ASSESSMENT**

### HISTORY-TAKING

Consider the following points when interviewing an adolescent.

- Consider whether the adolescent has the legal capacity to consent to treatment. The age of consent to treatment may vary depending on the legislation in the province or territory where care is provided. In the absence of legislation, the law presumes all clients, including adolescents, are legally competent to consent to treatment. If an adolescent is capable of discerning the nature, purpose, risks and benefits of treatment, s/he should be treated as a mature person capable of giving consent to treatment. Treatment of an adolescent will require the consent of a parent, guardian or next-of-kin where the adolescent does not have the legal capacity to consent (see the section “Consent to Medical Treatment” in the chapter “Introduction”)

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Ensure the adolescent is the prime historian regardless of whether the adolescent is interviewed alone or with a parent/caregiver. It is preferable to interview the adolescent without his or her parents or caregiver present. Be firm and educate the parent/caregiver about the adolescent’s stage of development, their need to develop independent skills and their right to privacy and confidential care. It may be necessary to obtain a history from other individuals such as a parent, caregiver, or teacher. If the adolescent has the capacity to make decisions on their own, the adolescent’s consent will be required in order to obtain the history from other individuals. Therefore, history taking will depend on the capacity of an individual adolescent.

Assure the adolescent that all information from your interaction with them will be kept strictly confidential (unless suicidal intention, homicidal intention, abuse, neglect, and/or another high-risk, potentially destructive activity is disclosed), as most adolescents perceive that care is not confidential (see “Confidentiality”, in the section “Records and Confidentiality” in the chapter “Introduction”).

Build rapport with the adolescent by starting with their chief concern and less sensitive questions. Move to more sensitive questions.

Do not make assumptions, and ask open-ended questions as much as possible to ensure that the relationship is supportive, trusting and non-judgmental.

Accentuate positive traits to help self-esteem and establish a positive relationship.

Write as little as possible during the encounter and allow the adolescent to talk openly for as long as they wish.

Sensitively explore sexuality, drugs, smoking, alcohol, school, mental wellness, violence and family. Most adolescents want to discuss these topics, but need the discussion started by a health care provider.

Ask questions, particularly ones about sexuality, in a gender neutral manner (for example, “Have you had sex with anyone?” or “Tell me about your sexual relationships.”)

Try to elicit information about the activities in which the adolescent participates and what his or her peer group is doing (for example, “Tell me about your friends and what you like to do together.”). Peer group activities generally reflect the individual’s activities.

If the adolescent is uncommunicative, a multiple-choice approach can be used (for example, “How would you compare your school performance with that of others? Better, worse or the same?”)

**HISTORY**

The following topics are key aspects of an adolescent health history.

**FUNCTIONAL INQUIRY**

A complete history of the health status of the adolescent should be undertaken whenever an opportunity to do so presents itself. This includes a full review of systems.

**Puberty**

A record of pubertal changes and, for adolescent females, a complete menstrual history is an essential component of the history. Adolescent females commonly experience dysmenorrhea, dysfunctional uterine bleeding and amenorrhea, so an inquiry should be made about these issues.

**Diet and Exercise**

Inquire about the types of meals and foods consumed at home and away from home. Ask about access to food, food allergies and intolerances, special diets (for example, vegetarian).

Ask about calcium, vitamin D and weight-bearing exercises as they influence bone mass development in adolescence. In addition, iron intake should be examined in adolescent females with heavy menses.


Ask about exercise, including type, length, and frequency.

**Sleep**

Ask about sleep habits, daytime tiredness, caffeine consumption, and potential issues resulting from disrupted sleep, including decreased concentration, academic performance, and irritability. Adolescents need 9–9.5 hours of sleep each night, but often get much less.
It is important to discuss psychosocial topics important to adolescent health whenever possible (for example, when an adolescent presents for an acute medical need such as a laceration). Issues related to sexuality, drug or alcohol use, mental wellness, violence, and family and school problems should be systematically reviewed. Questions about school attendance and performance and future plans for school and employment should be part of a complete evaluation. Two mnemonics (SAFE TIMES and HEEADSSS) are useful to prompt discussion with an adolescent, although only one should be used per visit. Further history should be taken if a concern is identified.

**SAFE TIMES**
- S for **sexuality** issues
- A for **affect** (for example, depression) and **abuse** (for example, drugs)
- F for **family** (function and medical history)
- E for **examination** (sensitive and appropriate)
- T for **timing** of development (body image)
- I for **immunizations**
- M for **minerals** (nutritional issues)
- E for **education** and **employment** (school and work issues)
- S for **safety** (for example, motor vehicle accidents, sexual violence, crime)

**HEEADSSS**
- H for **home environment** (include family structure, dynamics and relationship with family); for example, “Where do you live and who lives with you?”
- E for **education** (include favourite classes, difficulties, school performance) and **employment**; for example “Tell me about school.”
- E for **eating** (include foods eaten, concerns with overweight and/or obesity, eating disorders, disordered eating, body image, self-esteem); for example, “Tell me what you think about your weight and shape.”
- A for **activities** that are peer related (include extra-curricular activities, exercise, and peer relationships); for example, “What do you and your friends do for fun?”
- D for **drugs** (include tobacco, alcohol, others); for example, “What kinds of drugs have you seen in the community?” and/or “Tell me about your friends and use of drugs or alcohol.”
- S for **sexuality** (include age of first sexual activity); for example, “Tell me about any relationships you are in or have had in the past.”
- S for **suicide/depression**; for example, “Tell me about your sleep recently. Tell me about any feelings of boredom you get. Do you ever feel so bad that you’ve thought about hurting yourself?”
- S for **safety from injury and violence** (include bullying and abuse); for example “Accidents are the single largest cause of death and injury in youth. What are you doing to prevent an accident or injury to yourself? How has violence affected your life?”

A detailed list of questions for each topic area can be found in an article by Goldenring and Rosen (available at: http://www.aap.org/pubserv/PSVpreview/pages/Files/HEADSS.pdf) or questions for most topics can be found in one by BC Children’s Hospital (available at: http://www.bcchildren.ca/NR/rdonlyres/6E51B8A4-8B88-4D4F-A7D9-13CB9F46E1D6/11051/headss20assessment20guide1.pdf). Both articles discuss general tips for providing care to adolescents.

For further information on history-taking regarding substance use, mental health concerns and sexual health see the appropriate section below.

**FAMILY HISTORY**
Enquire about the family’s health history of medical or mental health conditions that would make an adolescent more at risk for the condition. In particular this includes mood disorders, cardiovascular disease and diabetes.

**PHYSICAL EXAMINATION**
Emphasis should be placed on common adolescent concerns. The following characteristics should be noted every 1–2 years and more often if concerns occur.

Older children and adolescents need to be examined ethically and with sensitivity, particularly for breast and genitalia examinations. Educate the parent and adolescent why they are being examined prior to doing so and receive informed consent. A “parent or nurse should be present, and the reason for their presence should be explained. The child [adolescent] should be allowed to dress and undress in privacy, and be given a gown for the examination.”

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Adolescent Health

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VITAL SIGNS

Height, weight, body mass index, and blood pressure should be measured yearly in adolescents. These height, weight and body mass index values should be plotted on WHO Child Growth Charts, which are available on the Rourke Baby Record website at: http://www.rourkebabyrecord.ca/download_rbr.asp. For children over 10 years old, body mass index (BMI) for age should be plotted on the chart to determine the most appropriate weights for height and for the diagnosis of obesity. It also helps determine under- and overweight as it corrects to the adult BMI standard definitions for overweight (> 25 kg/m²) and obese (> 30 kg/m²). The WHO BMI for age chart determines these by percentiles. The cut-off percentiles are less than the 3rd for underweight, 85th to 97th for overweight and greater than the 97th for obese. If a client is overweight or obese, refer to “Obesity” in the pediatric chapter, “Nutrition” and/or the 2006 Canadian Clinical Practice Guidelines on the Management and Prevention of Obesity in Adults and Children (available at: http://www.obesitynetwork.ca/page.aspx?menu=40&app=181&cat1=531&tp=2&lk=no).

SKIN

Obvious problems, particularly acne, should be noted and treated.

EYES

Visual acuity should be screened, as myopia commonly develops during the adolescent growth spurt.

MOUTH

Dental decay and periodontal disease can be significant problems in adolescence.

CARDIOVASCULAR SYSTEM

Functional murmurs are common in adolescence, but look for other forms of cardiac pathology (for example, mitral prolapse).

MUSCULOSKELETAL SYSTEM

Sports injuries, knee problems and other problems of the musculoskeletal system are common in adolescence. Routine screening for scoliosis is of questionable value. Therefore only those who present with symptoms or in whom scoliosis is found incidentally should be investigated.

BREASTS

Examination is only indicated if there is a specific reason (for example, periodic health examination to check for normal development of external genitalia, to check for physical signs of suspected abuse, request by parents). The child or adolescent should be told before being touched. Assess development and symmetry of the breasts to allow Tanner staging (see Table 1, “Tanner Staging of Adolescent Development”).

GENITALIA

Examination is only indicated if there is a specific reason (for example, periodic health examination to check for normal development of external genitalia, to check for physical signs of suspected abuse, request by parents). The child or adolescent should be told before being touched. “If the child is not at ease with a genital examination, neither force nor restraint should ever be used…If the child refuses to cooperate, the examination should be postponed.” Assess development of pubic hair to allow Tanner staging (see Table 1, “Tanner Staging of Adolescent Development” under “Adolescent Development”).

Boys should be examined with respect to normal growth and development of the external genitalia to allow Tanner staging (see Table 1, “Tanner Staging of Adolescent Development” under “Adolescent Development”). There is evidence to recommend against testicular clinical examinations for males at average risk of testicular cancer.

Girls who are sexually active should undergo a pelvic examination and Pap test (see “Pap Test” in the section “Diagnostic Tests”) with appropriate screening for sexually transmitted infections (STIs) at least once yearly. General indications for pelvic examination also include menstrual irregularities, severe dysmenorrhea, vaginal discharge, unexplained abdominal pain or dysuria.
DIAGNOSTIC TESTS

RUBELLA
Adolescent females without documented evidence of rubella immunization should undergo rubella titer testing; if negative, measles-mumps-rubella vaccine (MMR) should be given. Alternatively, those without any recorded evidence of immunization may be immunized without first undergoing rubella titer testing.

PAP TEST
A Pap test should be obtained for any sexually active adolescent female. Screening should start within 3 years of first vaginal sexual activity (including vaginal/oral and/or vaginal digital). If all Pap tests are negative, screening should be done annually until three annual Pap tests have been completed. If there is an adequate recall mechanism, screening can then take place every 2–3 years. If results are abnormal, the findings will dictate the screening intervals and/or need for a referral. Human papillomavirus immunization is not a substitute for routine Pap tests. STI screening should also be completed at the same time as a Pap test.

SEXUALLY TRANSMITTED INFECTION SCREENING
Screening for sexually transmitted infections (STIs), including chlamydia and gonorrhea should occur at least once yearly for sexually active adolescent females. HIV and syphilis screening is recommended if the adolescent is part of a high-risk group (for example, based on provincial data, Aboriginal people in British Columbia, Alberta and Yukon are more likely to be affected by syphilis24). There are no specific recommendations for adolescent male STI screening, yet screening should be done based on risk factors.

ANEMIA
Be suspicious of iron deficiency anemia. Risk factors include menstruating females, adolescents, poor nutrition, individuals of Aboriginal descent, socio-economic factors, vegetarians, and regular blood donors. Ferritin, not hemoglobin, should be used to screen for iron deficiency anemia.

LIPIDS AND GLUCOSE
A fasting lipid profile should be done on overweight or obese children over the age of 10 years.
Up to 1% of Aboriginal children aged 5–18 years have type 2 diabetes.27 Plasma blood glucose screening (for example, fasting or random) to screen for type 2 diabetes should be done in Aboriginal youth over age 10 with a body mass index (BMI) greater than the 85th percentile expected for age on the WHO Child Growth Charts (available at: http://www.rourkebabyrecord.ca/download_rbr.asp) and any one of the following:

- Sedentary lifestyle
- Born to a mother who had gestational diabetes
- First- or second-degree relative with type 2 diabetes
- Acanthosis nigricans
- Dyslipidemia
- Hypertension
- Polycystic ovarian syndrome


TUBERCULOSIS
Tuberculosis screening should be done in high-risk groups, which include Aboriginal populations.28 For more information, see “Tuberculosis” in the pediatric chapter, “Communicable Diseases” and the Canadian Tuberculosis Standards, 6th edition (available at: http://www.phac-aspc.gc.ca/tbpc-latb/pubs/tbstand07-eng.php).
GENERAL COUNSELLING TOPICS

IMMUNIZATION

Varicella, hepatitis B, meningococcal conjugate and human papillomavirus are the vaccines that may be required during adolescence.

For a detailed discussion of all issues related to vaccines and immunization refer to the latest Canadian Immunization Guide (available at: http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php), or for more recent updates on immunization refer to the National Advisory Committee on Immunization (available at: http://www.phac-aspc.gc.ca/naci-cnici/). Follow regional or provincial immunization schedules.

INJURY PREVENTION

For information about injury prevention, see the section “Injury Prevention Strategies” in the chapter “Pediatric Prevention and Health Maintenance”.

PUBERTY

Anticipatory guidance about the physical and psychosocial changes of puberty should be provided to adolescents and their parents. For a more specific continuum of development, see the section “Adolescent Development”.

Female

There is little to no evidence to recommend teaching breast self-examinations to females under age 40.

Male

For individuals at average risk, evidence suggests not to recommend teaching testicular self-examinations.

COMMON ADOLESCENT HEALTH CONCERNS – SEXUAL HEALTH

Sexual health for adolescents includes the related physical and psychosocial development, sexual function, attitudes and behaviours, and reproductive health. It includes contraception, sexual orientation, relationships (including abuse), STIs, and pregnancy. Discussion of any topic related to sexual health must be done with sensitivity, particularly in this age group.

Each health care contact is an opportunity to address sexual health during early adolescence. A survey of urban Ontario Aboriginal teens found that up to 37% of teens were sexually active by age 13 and 62% were sexually active by age 16. This finding was more predominant in males. More than half of these youth reported little to no use of contraception, and 24% of respondents under age 19 had been involved in a pregnancy.

Aboriginal adolescents on reserves are at risk for sexuality-related morbidity. If an adolescent is sexually active, the individual should be screened for high-risk behaviours and counselled accordingly. It is important to determine that adolescents are involved in consensual relationships that are free of abuse and coercion. Urban Aboriginal workers, adolescents and elders recommend increasing individual counselling, peer-based education, and opportunities to talk about sex with someone trusted in order to reduce the consequences of risky behaviour.

Finding Our Way presents information on sexual and reproductive health throughout the lifespan from the perspective of various Aboriginal cultures (available at: http://www.anac.on.ca/sourcebook/toc.htm). Specific to adolescents, it presents information on youth sexuality, sexual health, and teen pregnancy. It also has information on two-spirit people (the Aboriginal term for lesbian, gay, bisexual and transgendered individuals) and sexual diversity, family violence, sexual violence, HIV/AIDS, and other sexually transmitted infections.

HISTORY

The following brief script can serve as a guideline for assessment of sexual risk in adolescents, particularly those who are sexually active. Most questions apply to those who are or who have been sexually active.

“Part of my role is to assess sexual and reproductive health. Everything we talk about is confidential, there are not “right” or “wrong” answers and I will not judge you. There are three exceptions to this confidentiality where I would have to let others know what we talked about today: if you tell me that you are being abused, if you describe that you may hurt
Adolescent Health

Screen, counsel, and provide anticipatory guidance to all adolescents, in particular those who are sexually active. The behavioural counselling should include:

– Condom use for safer sex; however, educate that barrier methods do not always prevent viral STIs such as herpes and the human papillomavirus

– Abstinence and reduction in number of sexual partners

– Pre-exposure hepatitis A, B, and human papillomavirus vaccines

– STI information including transmission, signs, symptoms, risk factors, and safer sex practices

– Increased risk of STI transmission with use of spermicides containing nonoxynol 9 (it damages the vaginal epithelium); however, a nonoxynol 9–coated condom is preferable to no condom at all

– partner testing (for those previously sexually active) for youth contemplating sexual activity

– Contraception (see the section “Contraception”)

– Emergency contraception (for females) (see “Emergency Contraception” in the section “Contraception”)

– Pre-conceptual folic acid (for females)

SEXUALITY

The Canadian rates of sexual activity experience remained stable or declined between 1988 and 2002. Approximately 46% of Canadian adolescents are sexually active by grade 11 or at the age of 16 years. Sexual activity may even occur earlier among Aboriginal teens in some communities. Given the prevalence of sexual activity, adolescence is an important time for a person to determine his or her sexual identity and attitudes toward sexual orientation. Questions about sexual activity and the adolescent’s peer group may help to identify problems and provide counselling.

GAY, LESBIAN, BISEXUAL, TRANSGENDERED

Complex physical and social issues arise for gay, lesbian, bisexual or transgendered adolescents. Four and a half percent of males and 10.6% of females report having had at least one same-sex experience by the age of 19 years.

Approximately one in ten individuals may be gay, lesbian, bisexual, or questioning their sexuality; yet discrimination and intolerance is prevalent in some communities. When providing care for any individual, one should be open, ensure confidentiality, and...
use nonjudgmental and inclusive language such as “partner” not “boyfriend” to ensure that individuals who are sexually diverse feel included. When assessing sexual health, focus on sexual behaviours (for example, number and gender of partners) rather than labelling activity (for example, gay). For individuals who identify as two-spirited, provide gay/lesbian/bisexual positive information (including websites), support and services. One might encourage a young individual to talk with other openly gay, lesbian or bisexual individuals in the community.

Traditional beliefs about two-spirit individuals, the Aboriginal term for homosexual individuals, can be found in *Finding Our Way* (available at: [http://www.anac.on.ca/sourcebook/toc.htm](http://www.anac.on.ca/sourcebook/toc.htm)).

**COMPLICATIONS**

Young gay men, in particular those who are Aboriginal, are at high risk for acquiring HIV. The prevalence of infection in these groups is increasing, perhaps due to inconsistent use of effective HIV risk reduction strategies.\(^{41,42}\) HIV and sexually transmitted infection testing should be offered at every visit.

Gay and lesbian youth have higher rates of alcohol and drug use, depression and suicide, in particular if subjected to bullying, than their peers.\(^{43}\) Therefore, these behaviours and mental health should be assessed and interventions provided as needed. For more information on gay, lesbian, bisexual, and transgender adolescent health see Canadian Rainbow Health Coalition (available at: [http://www.rainbowhealth.ca/](http://www.rainbowhealth.ca/)).

**TEEN PREGNANCY**

In 2000, Canadian pregnancy rates for 15- to 19-year-olds were higher in the territories and the prairies than the national average of 38.2 pregnancies per 1,000 teens.\(^{44}\) Teenage pregnancy rates are 4 times higher for Aboriginal Canadian youth and 18 times higher for those aged under 15 years living on reserves, than the non-Aboriginal youth.\(^{45}\) Additionally, mortality rates are twice as high for teen pregnant women than adults who are pregnant.\(^{46}\) Teen pregnancy is an important public health concern for Aboriginal communities because an adolescent’s lack of readiness for pregnancy and parenthood affects the mother, father, child, and their families. Although teenage pregnancy may not be perceived as a concern in some First Nations and Inuit communities, one might assume that most pregnancies in teens under 18 are unintended. Therefore, one would want to reduce unintended teen pregnancies.

**RISK FACTORS FOR TEEN PREGNANCY**\(^ {46,47}\)

- Low self-esteem
- Early maturation or puberty
- Lack of education or vocational goals
- Plea for attention
- History of abuse (in particular sexual)
- Close relative who experienced teen pregnancy (for example, mother or sibling)
- Social and/or family difficulties
- Substance use (tobacco, alcohol, or others)
- Conflict in relationship with one or more parents
- Independence from family (for example, foster care)
- Living in group homes or detention centres, or street-involved

**FACTORS OF TEENAGE PREGNANCY ASSOCIATED WITH RISKS TO INFANT**\(^ {46}\)

- Poor prenatal care (reluctance to seek care) or access to perinatal health care
- Poor nutrition, leading to intrauterine growth retardation
- Smoking (58% of urban Ontario Aboriginal females reported doing so during their first pregnancy\(^ {48}\))
- Use of alcohol (17% of urban Ontario Aboriginal females reported doing so during their first pregnancy\(^ {48}\))
- Use of illicit drugs (21% of urban Ontario Aboriginal females reported doing so during their first pregnancy\(^ {48}\))
- Associated STIs
- Anemia
- Pregnancy-induced hypertension
- Prematurity
- Poor parenting skills
- Separation from child’s father
- Low income
- Low educational attainment
- Unemployment
HISTORY

A high index of suspicion for pregnancy is necessary even if an adolescent denies sexual activity or pregnancy. Consider the possibility of pregnancy and then ask the adolescent about its possibility when an adolescent presents with any of the following somatic complaints:

- Irregular menses
- Unusual vaginal bleeding
- Acute or chronic abdominal pain
- Unreliable menstrual history
- Amenorrhea
- Nausea
- Vomiting
- Fatigue

If a pregnancy is diagnosed:

- Ask about the female’s knowledge of her options and her feelings about them
- Enquire about family, cultural and community concerns that may affect her situation, and, when appropriate, about her partner’s role and opinion
- Determine the extent of her support system (for example, who she has told, how they reacted)
- Assess for other health concerns or diagnoses and for complications (for example, bleeding)
- Ask about current substance use (alcohol, smoking, and drugs) and other high-risk behaviours that could affect health
- Enquire where she lives and about her personal goals
- Ask about school (for example, does she attend, what are her academic goals)
- Ask if she is taking a multivitamin that contains folic acid and iron

DIAGNOSTIC TESTS

An early diagnosis is key to providing the adolescent with the most therapeutic options and to reduce risk.

Serum Pregnancy Testing

Human chorionic gonadotropin can be detected in serum as early as 6 days after conception.

Ultrasound

A pelvic or abdominal ultrasound may be useful to confirm the gestational age of the fetus, especially if the teen is not sure of the date of her last menstrual period, or if an ectopic pregnancy is suspected.

NONPHARMACOLOGIC INTERVENTIONS

Counselling the adolescent about her options related to pregnancy in a nonjudgmental manner is an important role for nurses. Options include carrying the fetus to term and keeping the infant, carrying the fetus to term and placing the child for adoption, or therapeutic termination of the pregnancy. The pregnant adolescent will have to decide which option she will pursue, without coercion or pressure to make a hasty decision. Since adolescents want to make the “right” decision, one can be supportive by stating, “When you have an unplanned pregnancy there is no perfect choice, so you should consider what is best for you at this time.” Referral should be available for all options. Adolescents should be fully supported, regardless of their decision. It should be noted that some clinics that do therapeutic abortions do not require a referral. See “Monitoring and Follow-Up” below for specific actions to take for each possible decision the teen might make.

MONITORING AND FOLLOW-UP

For All Pregnant Teens

- Assist the adolescent to develop a support network that might include family, her partner, friends, and health care providers and educate the people in this network about how they can help the pregnant teen
- Ensure follow-up appointments are made with the adolescent and/or if referrals have been made, appointments have been made and kept
- Screen for depression (see the section “Depression”)
- Keep in contact with all individuals who were pregnant, to offer education and guidance as necessary
- Assessment and counselling for drug and alcohol abuse
For Individuals Wanting to Terminate the Pregnancy

- Therapeutic abortion guidelines and services vary by province or territory, however, the procedure is usually available to those who are 7–19 weeks pregnant.
- Give details about the procedures available. Medical abortions with medications are available in the first trimester, but often require several office visits. Surgical abortion is available in both the first and early second trimesters.
- Maternal mortality rates related to adolescent pregnancy are higher than the risk of maternal mortality from surgical abortion.
- Refer to the appropriate services, ensure appointments for follow-up have been made (for counselling and contraception), and ensure potential complications have been explained (for example, excessive bleeding, fever, cramps after 48 hours).
- Post-abortion support and counselling should be provided. Anticipatory guidance should be given about common emotional responses, including grief and anger.

For Individuals Planning to Continue the Pregnancy

- Comprehensive prenatal care is essential to reduce complications, because pregnant teens are at increased risk for poor maternal weight gain (see Prenatal Nutrition Guidelines for Health Professionals: Gestational Weight Gain, available at: http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/index-eng.php), pregnancy-induced hypertension, STIs, anemia, and infant prematurity. Good nutrition and weight gain by the adolescent mother constitute two of the most important features of good prenatal care for this age group. Refer to the appropriate prenatal service at the gestational age recommended in your area.
- Pregnant teens should take a daily prenatal multivitamin that contains folic acid and iron.
- Aboriginal pregnant teens should be screened for gestational diabetes mellitus during the first trimester and, if negative, should be reassessed during subsequent trimesters. For more information, see “Gestational Diabetes Mellitus” in the adult chapter; “Obstetrics” and the Canadian Diabetes Association 2008 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada (available at: http://www.diabetes.ca/files/cpg2008/cpg-2008.pdf).
- Because of the higher prevalence of STIs in adolescents, stress the potential for passing such infections to the baby; initial and follow-up cultures, as indicated for all pregnancies, should be routine.
- Assess for immunity to rubella virus.
- Refer teen mothers and their partners to prenatal education programs that provide information on effective parenting, normal infant growth and development, and roles and responsibilities in infant care.
- To help a teen mother in her decision regarding adoption, she should be given the opportunity to have contact with the baby. Provide post-adoption support and counselling.
- Long-term planning with respect to adoption or with respect to support for the adolescent mother once her baby is delivered should be made.
- Encourage the teen to stay in school to promote positive maternal and child outcomes and to decrease isolation and depression.
- Advocate for the teen to receive child care, emotional support, and a source of income.
- Counsel the teen father and help him stay involved, if appropriate.
- Offer parent support programs where young parents can meet and support each other.
- Discuss the teen’s feelings around breastfeeding and provide education about breastfeeding and infant nutrition.
- There are a number of community-based programs available in many First Nations communities that help support healthy pregnancies, particularly those that are high risk, such as teen pregnancies. Evidence shows that for high-risk pregnancies, referrals to these programs can improve the outcomes for both mothers and infants. These programs are culturally appropriate and include:
  - Maternal Child Health Program – supports pregnant First Nations women and families with infants and young children, who live on reserve, to reach their fullest developmental and lifetime potential.
  - Canada Prenatal Nutrition Program – goal is to improve maternal and infant nutritional health with a particular focus on those at high risk.
Adolescent Health

Fetal Alcohol Spectrum Disorder Program (FASD) aims to prevent FASD births and improve the quality of life of those affected by FASD, by supporting First Nations and Inuit communities to develop culturally appropriate and evidence-based prevention and early intervention programs.

Postpartum Care

- Repeat pregnancy within 2 years after a first child is born occurs in 35% of pregnant adolescents. Therefore postpartum contraceptive counselling and interventions are key.
- Advocate for quality child care and flexible education programs for adolescent parents.
- Ongoing surveillance of the adolescent’s coping and parenting skills is of prime importance.

PREVENTION

- Provide community education programs to prevent unplanned teenage pregnancies, particularly those aimed at school-age children.
- Counsel youth to make good decisions throughout life for themselves while considering peer pressure (for example, become sexually active when they are ready and when it is good for them).
- Provide information about a variety of birth control methods from abstinence to contraception (including emergency oral contraception, see the section “Emergency Oral Contraception” in the chapter “Women’s Health and Gynecology”) and ensure they know how to access the methods they choose. This is particularly important for adolescents who are likely to engage in early sexual activity.
- Educate adolescents about safer sex (for example, condom use).
- Provide anticipatory guidance to females about folic acid use pre-conception.
- Assess intent to become pregnant to ensure appropriate interventions are provided according to the adolescents’ wishes.
- Infants of women with type 2 diabetes in pregnancy have an increased risk of congenital anomalies when glycemic control is poor in the first trimester. Therefore educate women with type 2 diabetes:
  - Teens with diabetes should use birth control if sexually active.
  - Teens with diabetes should be counselled regarding the increased risk of congenital anomalies, and how to reduce this risk.
- Teens with diabetes should strive to attain a preconception HbA1C of < 7% before trying to become pregnant.
- Teens with diabetes should be counselled to take 1–5 mg of folic acid daily 3 months prior to conception and through the first 12 weeks of pregnancy.


CONTRACEPTION

All females who are able to conceive should be counselled about contraception to prevent unwanted pregnancy. This counselling should stress the importance of protecting against both unwanted pregnancy and STIs (dual protection), as many youth stop using condoms once hormonal contraception is started, which increases the risk of STIs.

For information about other contraceptive methods see “Contraception” in the chapter “Women’s Health and Gynecology” and for information about emergency oral contraception see “Emergency Oral Contraception” in the chapter, “Women’s Health and Gynecology.”

HORMONAL CONTRACEPTION

Hormonal contraception is the most effective nonsurgical method for preventing pregnancy in adolescents. Hormonal contraceptives include combined (estrogen/progestin) oral contraceptive pills taken daily, transdermal patches applied weekly, intravaginal rings that are inserted every 4 weeks, progestin-only “minipills” that are taken daily and depot medroxyprogesterone acetate (DMPA) that is injected every 12–13 weeks.

- DMPA has the potential to decrease bone mineral density during a critical period of bone development in adolescents, so its use may ultimately result in a lower peak bone mass. There should be no restriction in use or duration of DMPA in females aged 18–45 with no contraindications. Women using DMPA are more likely to continue taking their contraception and have a lower incidence of repeat pregnancy than those using oral contraceptives.
– The transdermal patch may be less effective, and should be avoided, in women who weigh 90 kg or more
– In addition to prevention of pregnancy, hormonal contraceptives have non-contraceptive health benefits and risks (described below) that should be explained to adolescents when educating them about different options
– Regular and appropriate use of the contraceptive method of choice is very important. The main problem with oral contraceptives as a form of birth control is poor compliance, inconsistent use, and discontinuation of therapy (three months after initiation, 76% of teens remain on oral contraceptives and 12 months after starting 50% of teens continue use of this method)
– Discontinuation of contraception is usually secondary to adverse effects or to family or community pressure regarding childbearing
– Adolescent growth is not affected by the use of low-dose combined oral contraceptives, and weight gain is not a significant problem
– Dual protection should be used to protect females from pregnancy and STIs. Dual protection requires use of a hormonal contraceptive method, and either male or female condoms
– There is no need for a “rest” from hormonal contraception, as this actually increases the risk for a thrombotic event, and puts the client at risk for pregnancy and cycle irregularity

**Non-Contraceptive Benefits of Combined Oral Contraceptives**

In addition to providing contraception, combined oral contraceptive pills have many other benefits. The transdermal patch and vaginal ring are assumed to have similar benefits. These include:

– Menstrual cycle regulation (also found for the transdermal patch)
– Decreased menstrual flow
– Increased bone mineral density
– Decreased dysmenorrhea
– Decreased acne (most combined oral contraceptives will help mild to moderate acne)
– Decreased hirsutism
– Decreased risk of endometrial and ovarian cancer
– Decreased incidence of salpingitis and fibroids

**Non-Contraceptive Benefits of DMPA Injection**

The benefits of DMPA use, other than contraception are:

– Amenorrhea and therefore reduced incidence of dysmenorrhea and anemia
– Decreased risk of endometrial cancer
– Decreased symptoms of endometriosis, premenstrual syndrome, and chronic pelvic pain
– Decreased incidence of seizures

**Risks of Combined Oral Contraceptives**

The risks of combined oral contraceptive use are:

– Venous thromboembolism
– Myocardial infarction
– Stroke
– Gallbladder disease
– Breast cancer
– Cervical cancer

**Risks of DMPA Injection**

The risks of DMPA injection are:

– Delayed return of fertility
– Decreased bone mineral density

**Contraindications**

Different contraceptive methods have different absolute and relative contraindications to use.
Table 2 – Contraindications to Combined Contraceptives (Oral Pills, Transdermal Patches, and Vaginal Rings)*

<table>
<thead>
<tr>
<th>Absolute Contraindications</th>
<th>Relative Contraindications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoker over the age of 35 (≥ 15 cigarettes/day)</td>
<td>Adequately controlled hypertension</td>
</tr>
<tr>
<td>Hypertension (systolic ≥ 160 mm Hg or diastolic ≥ 100 mm Hg)</td>
<td>Hypertension (systolic 140–159 mm Hg, diastolic 90–99 mm Hg)</td>
</tr>
<tr>
<td>Current or past history of thromboembolism (VTE)</td>
<td>Migraine headache over the age of 35</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>Symptomatic gallbladder disease</td>
</tr>
<tr>
<td>Coronary artery disease including ischemic heart disease</td>
<td>Mild cirrhosis</td>
</tr>
<tr>
<td>Complicated valvular heart disease (pulmonary hypertension, atrial fibrillation, history of subacute bacterial endocarditis)</td>
<td>History of combined oral contraceptive–related cholestasis</td>
</tr>
<tr>
<td>Known or suspected cancer of the breast (or endometrium or cervix for vaginal ring only)</td>
<td>&gt; 35 years of age and a smoker (&lt; 15 cigarettes/day)</td>
</tr>
<tr>
<td>Known or suspected pregnancy</td>
<td>Use of medications that may cause contraceptive failure*</td>
</tr>
<tr>
<td>&lt; 6 weeks postpartum if breastfeeding</td>
<td>Weight ≥ 90 kg (transdermal patch only)</td>
</tr>
<tr>
<td>Liver tumour (adenoma or hepatoma)</td>
<td>Uterovaginal prolapse or vaginal stenosis if they prevent retention of the ring (vaginal ring only)</td>
</tr>
<tr>
<td>Undiagnosed vaginal bleeding</td>
<td></td>
</tr>
<tr>
<td>Migraine with aura or focal neurological symptoms</td>
<td></td>
</tr>
<tr>
<td>Diabetes with retinopathy/nephropathy/neuropathy</td>
<td></td>
</tr>
<tr>
<td>Severe cirrhosis</td>
<td></td>
</tr>
<tr>
<td>Allergy to any component of the ring (vaginal ring only)</td>
<td></td>
</tr>
</tbody>
</table>

*Medications that may cause contraceptive failure include: carbamazepine, griseofulvin, oxcarbazepine, phenobarbital, phenytoin, primidone, rifampin, ritonavir, St. John’s Wort, and topiramate

Table 3 – Contraindications to DMPA*

<table>
<thead>
<tr>
<th>Absolute Contraindications</th>
<th>Relative Contraindications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known or suspected pregnancy</td>
<td>Severe cirrhosis</td>
</tr>
<tr>
<td>Undiagnosed vaginal bleeding</td>
<td>Active viral hepatitis</td>
</tr>
<tr>
<td>Current diagnosis of breast cancer</td>
<td>Benign hepatic adenoma</td>
</tr>
</tbody>
</table>

HISTORY
- A thorough sexual health history is important when discussing contraception with adolescent clients
- Past medical, gynecological and obstetrical history (see “Assessment of the Female Reproductive System” in the chapter, “Women’s Health and Gynecology”). In particular, identify medical conditions that may interfere with hormonal contraception (for example, cardiac disease, deep vein thrombosis, hypertension, diabetes, migraines, breast cancer, vaginal bleeding, pelvic inflammatory disease, epilepsy)
- Smoking history
- Menstrual history (including last menstrual period, length of cycles, duration of menses, pain with menses, flow during period)
- Family history
- Medications that might interfere with hormonal contraception
- Review past use of birth control: methods, effectiveness, problems, reason for discontinuation
- Ask about contraindications to the method of contraception chosen. For combined oral contraceptives and DMPA see Table 2, “Contraindications to Combined Contraceptives (Oral Pills, Transdermal Patches, and Vaginal Rings)” and Table 3 “Contraindications to DMPA”

PHYSICAL FINDINGS
- Complete a thorough physical, including blood pressure and weight
- Assess skin (for example, oily, acne, hirsute)
- Pelvic examination, sexually transmitted infection testing and Pap test (If the adolescent is not yet sexually active these tests can be deferred until she becomes sexually active. If the adolescent will not consent to these initially, it should not preclude dispensing contraception)
DIAGNOSTIC TESTS

- Pap test and swabs or first void urine for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* for any client who has had sexual intercourse
- Urine pregnancy test to rule out pregnancy

MANAGEMENT

Goals of Treatment

- Prevent pregnancy
- Prevent STIs
- Identify and manage side effects

Appropriate Consultation

Consult physician or nurse practitioner prior to starting any form of contraception for clients who have any contraindications (see Table 2, “Contraindications to Combined Oral Contraceptives [Oral Pills, Transdermal Patches, and Vaginal Rings]” and Table 3, “Contraindications to DMPA”) and/or for clients with any circumstance in which close monitoring is needed, as stated below.

Situations in which close monitoring is needed:

- Client has depression
- Client has epilepsy
- Family history of dyslipidemia
- If surgery where immobilization is foreseen or after major surgery, consider discontinuation of the combined oral contraceptive pill 4 weeks prior to the surgery and substituting it for a progestin-only contraceptive. Another option is to discuss peri-operative antithrombotic prophylaxis with the client and the physician or surgeon.

In some jurisdictions, the follow-up consultation visit with a physician or a nurse practitioner must take place within 6 months of the onset of the treatment.

Nonpharmacologic Interventions

The nursing profession has a vital role in educating and counselling adolescents about the risks associated with sexual activity. Contraception for sexually active adolescents should be available and offered.

Appropriate counselling addresses the various methods of contraception (for example, barrier methods, spermicidal agents, hormonal contraceptives, intrauterine devices), presenting both their advantages and their disadvantages, including their non-contraceptive benefits as listed previously, and how they prevent pregnancy. This allows the individual to select the method that best suits their needs. Expected common side effects (for example, abnormal menstrual bleeding, nausea, headaches, breast tenderness) should be explained, and education that most side effects resolve within 3 months of continuous hormonal contraception use should be given. In addition, they should be educated that the risk of getting cancer or blood clots while taking hormonal contraceptives is low; hormonal contraceptives do not cause sterility or affect future childbearing; and if pregnancy occurs while on a hormonal contraceptive, there is no teratogenic effect on the fetus.

The use of condoms must be heavily emphasized to ensure dual protection against pregnancy and STIs. Both contraceptives and condoms should be made readily available at the nursing station, and condoms should be available at other strategic places in the community. Adolescents choosing to only use barrier methods of contraception (for example, condoms) should also be given information about emergency contraception (see “Emergency Contraception”).

Adolescents need to gain skills to help them negotiate contraception and condom use, in addition to using the chosen form of contraception properly and consistently.

Hormonal Contraception (Oral Contraception, Transdermal Patch, Vaginal Ring, and DMPA) Education

- Hormonal contraceptives prevent pregnancy by preventing release of ovum and causing changes in cervical mucus, endometrial lining and tubal motility
- Teach client how to take their contraceptive. Encourage use of electronic resources and/or phone alarms to help remind adolescents to administer their contraceptive method of choice at the appropriate time:
  - oral contraception (she should take the pill at the same time each day and should not miss any pills for 21 days, then either have 7 pill-free days or take the 7 placebo tablets before starting a new pack)
  - transdermal patches (she should apply a patch to her clean, dry buttocks, abdomen, upper outer arms or upper torso (but not on the breasts) and then remove and replace the patch on the same day each week for three consecutive weeks and then have 7-day patch-free interval before applying a new patch; she should touch the patch daily to ensure it is in situ)
Adolescent Health

– vaginal ring (she should insert the ring vaginally and leave in place for 3 weeks, then remove it and wait no longer than 7 days before inserting a new ring)

– DMPA injection (she should make an appointment and return to the clinic for repeat injections at 12-week intervals)

– Teach clients how to start taking their contraceptive (see “Contraceptive Start Methods”)

– Educate clients about what to do if they miss their contraceptive (see “Missed Contraceptive”)

– Instruct client to return to clinic immediately if headaches, leg pain or swelling, amenorrhea, breakthrough bleeding, eye problems, chest pain or abdominal pain develop

– Antibiotic use does not affect combined oral contraceptive efficacy (except for griseofulvin, a rarely used antifungal agent, and rifampin, a commonly used antitubercular agent)

– Offer smoking cessation counselling to clients taking a combined oral contraceptive pill, if this is their contraceptive method of choice. Smoking increases the risk of serious pill-related complications

– Educate teens taking DMPA about the potential for decreased bone mineral density, particularly in the first two years of use and counsel about bone health measures (for example, smoking cessation, calcium and vitamin D supplementation, weight bearing exercise, decreased alcohol and caffeine consumption)

Dysmenorrhea symptoms may decrease with all combined oral contraceptives

– PMS and bloating is often helped with the progestin drospirenone

– Acne improves in women taking oral contraceptives. Products containing the progestins levonorgestrel (Alesse, Aviane), norgestimate (Tri-Cyclen), drospirenone (Yasmin) and cyproterone acetate (Diane-35, generics) are approved for the treatment of acne

A physician or nurse practitioner should be consulted for specific client needs.

**Transdermal Patch**

Only one transdermal patch (Evra) is available in Canada; it is not currently listed on NIHB drug benefit list. It contains ethinyl estradiol and norelgestromin. The spectrum of contraindications and non-contraceptive benefits are similar to those of combined oral contraceptives.

**Vaginal Ring**

Only one vaginal ring (NuvaRing) is available in Canada; it is a limited use benefit on the NIHB drug benefit list. It contains ethinyl estradiol and etonorgestrel and is available in one strength. The spectrum of contraindications and non-contraceptive benefits are similar to those of combined oral contraceptives.

**DMPA Injection**

If initiating this contraception does not allow for a preplanned consultation with a physician or nurse practitioner, an initial dose of DMPA can be administered with a plan to follow up with a physician or nurse practitioner at the next treatment visit. The SOGC guidelines recommend that health care providers carefully weigh the risks and benefits of Depo-Provera before prescribing this medication. Further assess for vitamin D and calcium supplements.

medroxyprogesterone (Depo-Provera and generics), 150 mg IM every 12 or 13 weeks

**Contraceptive Start Methods**

Hormonal contraceptives can be started at any time during a cycle. Studies have found that if a quick start method is used, where an adolescent takes the first contraceptive pill (or potentially applies the first patch) in the care provider’s office (after ruling out pregnancy) compliance is improved and the starting instructions are simple. Additionally, there is no increased prevalence of side effects.

**Pharmacologic Interventions**

Before initiating a contraceptive for an adolescent who is postpartum, other considerations need to be made. See the section “Contraception.” In the chapter “Women’s Health and Gynecology”

**Combined Oral Contraceptive Pill**

When choosing a combined oral contraceptive pill, the lowest dose of estrogen (< 35 µg) and the lowest possible dose of any progestin is generally selected. The adolescent’s specific concerns should also be addressed. Nursing stations stock a limited choice of oral contraceptives, for example, one low-dose combined oral contraceptive such as Alesse.

Most combined oral contraceptive pills will be effective in improving the following concerns:

– Heavy menstrual flow is likely to decrease with a lower dose of estrogen and/or a higher dose of progestin

Pediatric Clinical Practice Guidelines for Nurses in Primary Care 2011
**Conventional start:** If the combined oral contraceptive pill, vaginal ring or DMPA is started within the first 5 days of menses, the combined oral contraceptive pill is started the first Sunday after menses begins, or the transdermal patch is started on day 1 of menses, no back-up method of contraception is required, provided that no pills or patches are missed within the first month.

**Quick start:** If any method is initiated at a time other than those listed for conventional start, a back-up method of contraception (for example, condoms) should be used during the first week of contraceptive use, provided that no pills or patches are missed within that time period. Thereafter, condom use should be recommended to prevent STIs.

**Missed Contraceptive**
Adolescents need simple, clear written and oral instructions on what to do if they miss a dose of their contraceptive.

### Missed Combined Oral Contraceptive Pills:

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>One missed dose in first week (&gt; 24 hours late)</td>
<td>Take one active pill ASAP and continue pack as usual. Use back-up contraception for 7 consecutive days</td>
</tr>
<tr>
<td>&lt; 3 missed doses in week 2 or 3</td>
<td>Take one active pill ASAP and continue pack as usual. Eliminate the hormone-free interval for that cycle and start new pack</td>
</tr>
<tr>
<td>≥ 3 missed doses during week 2 or 3</td>
<td>Take one active pill ASAP and continue pack as usual. Eliminate the hormone-free interval for that cycle and start new pack. Use back-up contraception until 7 consecutive days of correct use are established</td>
</tr>
<tr>
<td>Hormonal-free interval &gt; 7 days</td>
<td>Assess for emergency or back-up contraception</td>
</tr>
<tr>
<td>Repeat omissions or failure to use back-up contraception</td>
<td>Assess need for emergency or back-up contraception. Counsel on use of contraceptive that may require less compliance</td>
</tr>
</tbody>
</table>

### Missed Transdermal Patch:
Keep the same patch change day, even if a new patch is applied on a different day of the week, to keep instructions simple. The transdermal patch is effective if in situ for a maximum of 9 days. After this period, it is considered a detached patch.

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patch partially or completely detached for &lt; 24 hours</td>
<td>Attempt to reattach it OR apply a new patch ASAP; Keep the same patch change day</td>
</tr>
<tr>
<td>Patch partially or completely detached for &gt; 24 hours (or unsure how long) in week 1 OR patch application has been delayed after the patch-free week (&gt; 7 days)</td>
<td>Apply a new patch ASAP. Use back up contraception for 7 days. Provide emergency contraception if unprotected intercourse in the past 5 days</td>
</tr>
<tr>
<td>Patch is detached for &lt; 72 hours in weeks 2 or 3</td>
<td>Apply a new patch right away and start a new cycle. Eliminate the patch-free interval for that cycle</td>
</tr>
<tr>
<td>Patch is detached for ≥ 72 hours in weeks 2 or 3</td>
<td>Apply a new patch right away and start a new cycle. Eliminate the patch-free interval. Use back up contraception for 7 days. Provide emergency contraception if unprotected intercourse in the past 5 days.</td>
</tr>
</tbody>
</table>
**Missed Vaginal Ring:**
Keep the same vaginal ring removal day, even if a new vaginal ring is inserted, to keep instructions simple. The vaginal ring is effective if in situ for a maximum of 28 days. After this period, it is considered a removed ring. Caution individuals that vaginal rings can be “removed” when emptying their bowel or bladder or removing a tampon. For this reason tampons are not recommended.

**Table 6 – Recommendations for Missed Vaginal Ring**

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ring removed &lt; 3 hours</td>
<td>Re-insert the ring after rinsing it in lukewarm water OR insert a new ring ASAP</td>
</tr>
<tr>
<td>Ring removed &gt; 3 hours during week 1 or if unsure how long the ring was removed</td>
<td>Re-insert the ring after rinsing it in lukewarm water ASAP. Ring removal day remains the same. Use back-up contraception for 7 days. Provide emergency contraception if the individual has had unprotected intercourse in the past 5 days</td>
</tr>
<tr>
<td>Ring is removed for &lt; 72 hours during week 2 or 3 of a cycle</td>
<td>Re-insert the ring after rinsing it in lukewarm water ASAP. Eliminate the 7-day ring-free interval for that cycle</td>
</tr>
<tr>
<td>Ring is removed ≥ 72 hours during week 2 or 3 of a cycle</td>
<td>Re-insert the ring after rinsing it in lukewarm water ASAP. Eliminate the 7-day ring-free interval for that cycle. Use back-up contraception for 7 days. Also provide emergency contraception if the individual has had unprotected intercourse in the past 5 days</td>
</tr>
<tr>
<td>Rings left for &gt; 28 days</td>
<td>For 28–35 days: Insert new ring with no ring-free interval. Keep it in until scheduled ring removal day. For &gt; 35 days: Insert new ring with no ring-free interval. Keep it in until scheduled ring removal day. Use back up contraception for 7 days. Consider emergency contraception if the individual has had unprotected intercourse within the previous 5 days</td>
</tr>
</tbody>
</table>

**Missed DMPA Injection:**

**Table 7 – Recommendations for Missed DMPA Injection (> 12 weeks after the most recent injection)**

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most recent injection was &lt; 14 weeks ago</td>
<td>Give the next injection ASAP. No additional measures are required</td>
</tr>
<tr>
<td>Most recent injection was ≥ 14 weeks ago AND unprotected intercourse occurred &lt; 5 days ago AND urine pregnancy test is negative</td>
<td>Give the next injection ASAP. Provide emergency contraception. Use back-up contraception for 7 days. Repeat urine pregnancy test in 3 weeks</td>
</tr>
<tr>
<td>Most recent injection was ≥ 14 weeks ago AND unprotected intercourse occurred &gt; 5 days ago AND urine pregnancy test is negative</td>
<td>Give the next injection ASAP. Use back-up contraception for 7 days. Repeat urine pregnancy test in 3 weeks</td>
</tr>
<tr>
<td>Most recent injection was ≥ 14 weeks AND the person has had protected intercourse in the past 14 days AND urine pregnancy test is negative</td>
<td>Give the next injection ASAP. Use back-up contraception for 7 days</td>
</tr>
</tbody>
</table>
Compliance is a significant problem in adolescents, and lack of compliance is a major factor in the failure of oral contraception.

To increase adherence to a contraceptive plan, use the following strategies:

- Explain and give simple, clear, written information on how the method prevents pregnancy, its advantages and disadvantages, how the individual needs to take or use the method to be compliant, and common myths and misconceptions (see “Nonpharmacologic Interventions” in this section).
- Explain the potential side effects, and how long they are likely to persist.
- Discuss the risks and when to seek medical care (see “Nonpharmacologic Interventions” in this section).
- Ensure the adolescent knows what to do if a pill/patch/ring/injection is missed (see “Missed Contraception”).
- Educate about emergency contraception and when it is needed (see “Emergency Contraception”).
- Emphasize non-contraceptive benefits of hormonal contraceptives (see “Non-Contraceptive Benefits of Combined Oral Contraceptives”).
- Have frequent follow-up visits.

The adolescent should understand that initially there is a high likelihood of spotting or break-through bleeding with use of hormonal contraceptives. This side effect usually diminishes or disappears within 3 months. Therefore the adolescent should remain on one form of contraception for at least 3 months before a decision to try another form is made. Some females, particularly those on DMPA injections, may miss their menses, so the adolescent should be aware of this.

**Monitoring and Follow-Up**

Follow up with the adolescent at 1, 3, and 6 months after initiation of contraception to evaluate significant side effects and monitor blood pressure. More frequent follow-up should take place for those with situations requiring it (see list under “Appropriate Consultation”). The adolescent should return sooner if any significant side effect or complication occurs.

One way to remember and educate clients about complications of hormonal contraceptives is the mnemonic ACHES, which stands for Abdominal pain, Chest pain, Headaches (with focal neurological symptoms), Eye problems, and Severe leg pain. After the first 6 months, follow-up should be done annually at well adolescent/woman visits, which include Pap smears and STI testing as required. See the guidelines for adolescent physical examinations, in the section “Physical Examination”.

For other detailed information about contraceptive methods see the section “Contraception” in the chapter “Women’s Health and Gynecology.”

**Referral**

If initiating contraception does not allow for a preplanned consultation with a physician or a nurse practitioner, initial doses can be provided with a plan to refer the client for follow-up at the treatment renewal visit. In some jurisdictions the follow-up visit with a physician must take place within 6 months of the onset of treatment.

**EMERGENCY CONTRACEPTION**

Progestin-only emergency contraception is the preferred emergency contraceptive method to recommend to adolescents because of its effectiveness, the low incidence of side effects and because a pelvic examination is not required.

If an adolescent has had unprotected intercourse, emergency contraception is a contraceptive option if provided within 5 days (120 hours) of intercourse. Emergency contraception is more effective the sooner it is used after unprotected intercourse: 95% effective within the first 24 hours; 85% effective within 25–48 hours; and 58% effective within 49–72 hours. Therefore, it should be taken as soon as possible after intercourse.

No pelvic examination, pregnancy test, PAP test or STI screening is required, unless otherwise indicated, to provide hormonal emergency contraception. However, these are important parts of well woman care in sexually active individuals. The only contraindication to emergency contraception is a known pregnancy.

For detailed information on emergency contraception, see the section “Emergency Oral Contraception” in the chapter “Women’s Health and Gynecology.”
Counselling and Educational Interventions

- Educate all adolescents (both male and female) of child-bearing age about emergency contraception (it is used to prevent unplanned pregnancies in emergencies only), where it is available (for example, progestin-only emergency contraception is available in pharmacies without a prescription), how it works, when it is indicated (including time limits for use), how effective and safe it is, and common side effects
- If emergency contraceptive is required and the adolescent wants to start a hormonal contraceptive, she can start the day after taking the emergency contraceptive pill or with her next period. A back-up contraceptive method (such as condoms) should be used until the hormonal contraceptive method has been used for 7 consecutive days.
- Follow-up for a pregnancy test is required only if the next menstrual period does not occur within 21 days of use (28 days if a combined oral contraceptive was started after emergency contraception) or if the period is unusual in any way.

SEXUALLY TRANSMITTED INFECTIONS


Experts identify STIs as a prominent health issue for Aboriginal youth, as there are health, social, educational and economic consequences. From 1997 to 2004, Canadian females 15–19 years old had a 49% increase in reported chlamydia rates and a 75% increase in reported gonorrhea rates, whereas males in the same age group had a 94% increase in chlamydia and an 80% increase in gonorrhea rates. The 15- to 19-year-old age group has the highest risk of contracting chlamydia or gonorrhea of any age group. Canadian women 19–24 years of age also have had very high chlamydia rates since 1997. Gonorrhea and human papillomavirus have the highest prevalence in the under-25 age group. STIs are an important public health concern for the community.

The prevalence of a certain STI differs according to the community and can change over time. The occurrence of STIs in males who have sex with males, individuals under 30, women, and injection drug users is a significant public health issue.

Risk Factors

Behaviours that put one at increased STI risk include:

- Sexual activity with a person with a known STI
- Sexually active and age under 25 years
- A new sexual partner or more than two partners in the past year
- No contraception
- No use of barrier contraception
- Serial one-partner relationships
- Injection drug use
- Substance use, particularly if sexual contact while under the influence
- Sex with blood exchange
- Sharing sex toys
- Sex workers and their clients
- Sex for food, money, shelter, or drugs
- Homeless, impoverished, imprisoned, or street-involved
- Partnering with anonymous individuals (for example, internet)
- Sexual abuse or assault victims
- Previous STI
- Men who have sex with men
- Travel (for example, between reserves, to urban communities, and internationally)

DIAGNOSTIC TESTING

It is essential that the individual be assured of the confidentiality of test results and medical records so that they are more likely to get tested. Early testing and treatment should be promoted.

Consideration should be given to human immunodeficiency virus (HIV), Venereal Disease Research Laboratory (VDRL) and STI testing for all sexually active adolescents and those who have been the victim of sexual abuse. Urine screening for gonorrhea and chlamydia should be offered if available and if the adolescent is hesitant to undergo other screening mechanisms (for example, cervical swabs).

MANAGEMENT

Confidential STI treatment should be available.
Nonpharmacologic Interventions

Counselling for safer sex includes condom use to decrease STI rates. One survey found that Canadian teens are less likely to use condoms, particularly as they become older, as a change was noted in usage from grade 9 to grade 11. Most people infected with STIs have no symptoms, so the teen or their partner may not know that they are infected. Therefore, it is essential to practice safer sex every time, by using a condom to reduce the risk of getting or sharing an STI. Harm reduction can be enacted by distributing condoms and exchanging needles.

Educate about how STIs are transmitted, how STI risk factors contribute to transmission (for example, peer pressure, alcohol, and drug use can make one forget about safe sex), how to protect from STIs, the common signs and symptoms of STIs, potential consequences of STIs, and what to do if an STI is suspected. Individuals should be encouraged to seek early testing, because if diagnosed early many STIs are easily treated. However, all STIs cause emotional concerns and physical harm.

Prevention

Consideration should be given to hepatitis B virus and human papillomavirus vaccinations for all adolescents.


COMMON ADOLESCENT HEALTH CONCERNS – MENTAL HEALTH

Many emotional changes occur during adolescence, along with more intense peer pressure, and more cases of depression, anxiety, and suicide.

HISTORY

– Ask about emotional health, safety, and overall mental wellness
– Screen for depressive disorders if diagnosis, treatment and follow-up with a health professional is possible

COUNSELLING

Provide anticipatory guidance to adolescents about the potential for mental health concerns starting in adolescence.

COMMUNITY AND OTHER RESOURCES

Health Canada provides mental health and suicide prevention programming, as well as substance abuse prevention and treatment programs. The programs offer a range of culturally relevant mental health and addictions programs and services which are guided by community priorities. More information is available on the First Nations, Inuit and Aboriginal Health: Mental Health and Wellness website, at: http://www.hc-sc.gc.ca/fniah-spnia/promotion/mental/index-eng.php

Services are offered by both professionals and para-professionals working in communities. The mental health and addictions resource people may be contacted through a community’s Health Director or Health Canada’s regional office. Through Non-Insured Health Benefits Program, Health Canada also provides crisis mental health counselling for First Nations individuals residing off-reserve.

Other resources on child and youth mental health may be found at:

– Ontario Centre of Excellence for Child and Youth Mental Health (available at: http://www.excellenceforkidandyouth.ca/)
– YouthNet (available at: http://www.youthnet.on.ca/)
DEPRESSION

For information on what defines depression, its clinical presentation and its management, see the section “Depression” in the adult chapter “Mental Health”. Some specific information on adolescent and child depression follows.

“Just over one in four First Nations youth report feeling sad, blue or depressed for two weeks in a row during the course of a year.” Major depression occurs in 6–8% of adolescents and is associated with major morbidity and a recurrence rate of 60–80% by the end of adolescence. Only half of adolescents with depression are diagnosed before adulthood, and of those diagnosed only half are treated appropriately. The probability of having had depression by late adolescence is 10–20%. Often adolescents will have remissions and recurring episodes.

The Guidelines for Adolescent Depression in Primary Care (GLAD-PC) Toolkit is a helpful guide to adolescent depression. It is endorsed by the Canadian Paediatric Society (available at: http://www.glad-pc.org/).

HISTORY

For adolescents who have risk factors and/or presenting with mainly emotional concerns, the use of a standardized depression tool to assess for depressive symptoms may be a starting point. Although diagnostic aids may not be culturally relevant, they may be used as guides to a more holistic assessment. An interview with the adolescent and the family/caregiver, if possible, is essential to investigate the DSM-IV-TR criteria. Some diagnostic aids are found in the GLAD-PC Toolkit online, available at: http://www.glad-pc.org/. Two of these can help with establishing a diagnosis and monitoring the adolescent’s response to treatment:

- Modified Client Health Questionnaire 9 (PHQ-9)
- Children’s Global Assessment Scale (C-GAS)

Prepubertal children often have the following symptoms:

- Somatic concerns (usually due to inability to label and state emotions)
- Psychomotor agitation
- Mood congruent hallucinations
- Phobias, separation anxiety, increased worrying and rumination (may manifest as crying, loneliness, irritability, withdrawn posture)

Adolescents often have the following symptoms:

- Change in appetite, weight or sleep patterns
- Guilt
- Refusal to attend school or poor school performance
- Delusions
- Suicidal ideation or behaviours
- Psychomotor retardation or hypersomnia
- Substance use
- Low self-esteem, apathy, boredom
- Antisocial (withdrawal from family and social activities)

For other considerations during the history, see “History” in the “Depression” section of the chapter, “Mental Health.”

MANAGEMENT

Nonpharmacologic Interventions

Often the parent may need encouragement to seek counselling and/or treatment for themselves. Suggestions to involve the family are discussed on pages 90–102 of Treating Child and Adolescent Depression: A Handbook for Children’s Mental Health Practitioners (available at: http://www.lfcc.on.ca/depression_handbook.html).

Cognitive distortions are negative representations about the world, the individual and the future. Working to alter these negative thoughts, attitudes and beliefs is central to the treatment of depressed adolescents. These distortions often involve negative self-evaluations, over-generalizations, details taken out of context, focusing on the negative, minimizing the positive, and personalizing broader family, community, or societal problems. A variety of strategies can be used to modify these cognitive distortions, including identifying and restructuring the distortions with the adolescent. Details and how to utilize each one are described on pages 46–59 of Treating Child and Adolescent Depression: A Handbook for Children’s Mental Health Practitioners (available at: http://www.lfcc.on.ca/depression_handbook.html).

Maladaptive behaviours are unhealthy, unhelpful or have negative ways of thinking or doing things that lead to poor outcomes. Depressed adolescents may exhibit many of these behaviours (for example, inability to get pleasure from regular activities, suicidal attempts, interrupted sleeping and eating patterns) which one can help modify. Some strategies
are education, role play, and modelling. First Nations and Inuit youth also respond positively to Elder mentoring as well as cultural or traditional on-the-land activities. More techniques and how to utilize each one are described on pages 64–76 of Treating Child and Adolescent Depression: A Handbook for Children’s Mental Health Practitioners (available at: http://www.lfcc.on.ca/depression_handbook.html).

Parents of children struggling with mental health issues may need encouragement to seek counselling and/or treatment for themselves, given the stress involved in caring for a loved one in distress. Ways to involve the family are discussed on pages 90–102 of Treating Child and Adolescent Depression: A Handbook for Children’s Mental Health Practitioners (available at: http://www.lfcc.on.ca/depression_handbook.html).

For other nonpharmacologic considerations, see “Nonpharmacologic Interventions” under the “Depression” section of the chapter, “Mental Health.”

**Pharmacologic Interventions**

Only some medications have been shown to be safe and effective for use in children and adolescent depression. Some selective serotonin reuptake inhibitors (SSRIs) have good evidence for use. Fluoxetine and citalopram are first-line medications. Others SSRIs include sertraline, escitalopram, paroxetine, and fluvoxamine. A physician should be consulted to prescribe any of these medications.

**SUICIDAL BEHAVIOUR**

Various factors related to adolescence can contribute to suicidal behaviour. Excessive stress levels, issues with self esteem, substance and domestic abuse may all contribute to emotional distress and higher suicide rates among Aboriginal youth.

For information on what defines suicidal behaviour, its clinical presentation and its management, see “Suicidal Behaviour” in the chapter, “Mental Health.” Some specific information on child and adolescent suicidal behaviour follows.

The suicide rate among Aboriginal youth younger than 14 is 3.9 per 100,000 individuals; in contrast, suicide is almost non-existent for other Canadians in this age group. “One in five First Nations youth respondents had a close friend or family member commit suicide in the past year.”

**HISTORY**

In addition to assessing the adolescent, also ask the parent/guardian for information (for example, ask “what has happened over the past week?” and/or “has your child hurt himself or tried to?”) in the adolescent’s presence, if the adolescent gives permission. It should be deferred if the adolescent’s life is in imminent danger.

For other considerations during the history, see “History” under “Suicidal Behaviour” in the chapter, “Mental Health.”

**MANAGEMENT**

**Nonpharmacologic Interventions**

- Individual treatment for children and adolescents, in addition to those outlined in the adult guidelines, is aimed at enhancing self-esteem and sense of importance in the family or social environment.
- Suicide threats, gestures or attempts in children and adolescents are most often efforts to communicate despair, frustration and unhappiness and efforts should be made to understand the sense of this distress.
- Temporary removal from the home may be advisable and may require admission to a health or social welfare facility. Consider reporting to local child welfare agencies if warranted.
- Darkness Calls is a comic book that can be used to educate about a First Nations teen dealing with suicidal thoughts (available at: http://ccamhr.ca/resources/Darkness_Calls.pdf)
- Dialectical behaviour therapy may be effective for suicidal behavior in adolescents who have or are thought to have borderline personality disorder or bipolar disorder. It requires training to deliver four skills modules that include core mindfulness, distress tolerance with a focus on acceptance of things that cannot be changed, interpersonal efficacy with a focus on change, and emotional regulation.

For other nonpharmacologic considerations, see “Nonpharmacologic Interventions” under “Suicidal Behaviour” in the chapter, “Mental Health.”
**Suicide Prevention**


**EATING DISORDERS**

The eating disorders anorexia (one does not eat very much) and bulimia (one eats too much and then vomits) are not very prevalent in First Nations adolescents. Therefore, they are not covered in these guidelines. However, if an eating disorder is encountered in clinical practice, the Canadian Paediatric Society has two resources of interest:

- Eating Disorders in Adolescents: Principles of Diagnosis and Treatment (available at: http://www.cps.ca/english/statements/AM/am96-04.htm)

**SELF-INJURY**

Self-injury is defined as “deliberate and often repetitive destruction or alteration of one’s own body tissue, without suicidal intent.” The acts can injure one’s body, mind and/or spirit. This can include skin cutting, burning, self-hitting, interfering with wound healing, severe scratching, hair pulling, inserting objects into the body, and bone breaking. Sites are usually chosen so that they can be covered up or hidden (for example, arms, legs, chest).

Since this is often a private act and professionals are not aware of it, statistics are not reliable. However, in one survey, 13% of adolescents indicated that they were participating in self-injurious behaviours. It is thought that males and females have similar rates of self-injury, but females are more likely to seek help or be discovered. This behaviour usually begins in early adolescence and peaks between age 16 and 25 and lasts for up to 10 years, unless untreated.

Self-injury is an ineffective coping mechanism that provides rapid relief from psychological distress (for example, intense, painful emotions, loneliness, depression, anger) and/or an absence of feelings (for example, numbness). Most often, individuals who injure themselves seek to feel better, as they have not been taught how to effectively cope with their distress. They often do it to feel emotions more intensely, or to punish themselves for being bad. Through self-injury, they feel pain on the outside (although not usually during the act), not from the emotions that overwhelm them. Therefore, their need is satisfied and they feel calm and soothed. Most individuals who self-harm are not suicidal, but we cannot assume that those who self-harm will never be suicidal.

**RISK FACTORS**

- Eating disorder
- Abuse (sexual or physical)
- Discouraged from expressing emotions as a child (in particular anger and sadness)
- Sense of abandonment or loneliness as a child
- Lack of supportive relationships (or disruption of one)
- Substance use
- Low self-esteem (for example, feeling worthless, hopeless and/or helpless)
- Individuals of Aboriginal descent
- History of surgery or hospitalization early in life
- Average to high intelligence
- Middle to upper class
- Depression

**WARNING SIGNS OF SELF-INJURY**

Adolescents most often try to hide this behaviour; however, some warning signs are:

- Unexplained, frequent injuries
- Wearing long pants and sleeves in warm weather
- Low self-esteem
- Difficulty in relationships
- Difficulty handling emotions

**HISTORY**

Follow the guidelines for history-taking with adolescents, as detailed in the section “History-Taking”, under “Adolescent Health Assessment”. Closed questions may need to be used to help ensure clear responses. Asking adolescents about self-injury will not give them the idea or encourage them to self-injure.

Assess for depression (see the section “Depression”) and anxiety (see the section “Anxiety”) to rule out comorbid concerns.
PHYSICAL FINDINGS
Assess for the physical and psychosocial findings:

- General appearance (for example, dress, grooming, posture, eye contact, manner, attentiveness to examiner, emotional facial expression, alertness)
- Attitude and interaction (for example, cooperative, guarded or avoidant)
- Activity level (for example, calm, active, restless, psychomotor activity, abnormal movements, gait)
- Speech (for example, rate, rhythm, volume, amount, articulation, spontaneity)
- Thought process (for example, coherence, logic, organization, stream of thought, blocking, attention) and content (for example, delusions, obsessions, paranoid ideation, overvalued ideas, perceptual disorders, phobias)
- Perception (for example, hallucinations, illusions, depersonalization)
- Cognition and judgment
- Insight (for example, awareness of illness)
- Impulse control (for example, aggressive, hostile)
- Mood or affect (include stability, range, appropriateness, intensity)
- Parent/guardian adolescent interaction, if possible (for example, warm, nurturing, conflict, rejecting, affectionate)

Assess the entire integumentary system, including hair and nails. Additionally, a full musculoskeletal assessment should be completed.

DIFFERENTIAL DIAGNOSIS
Suicidal behaviours.

MANAGEMENT

**Goals of Treatment**
Early diagnosis helps ensure successful outcomes.

**Appropriate Consultation**
Consult a physician as needed related to medical treatment and to ensure appropriate counselling is provided to the adolescent.

**Nonpharmacologic Interventions**
Provide medical treatment as required.

Early treatment is most helpful. Some may stop self-injury when their behaviour is detected, but others need family interventions and counselling.

Treat any comorbid conditions that are present (for example, depression, substance use).

Listen to the adolescent about their behaviours and encourage them to talk about them. Do not blame the adolescent, or state that you do not understand their behaviour. Help the adolescent find alternatives (for example, problem solving, conflict resolution, anger management, assertiveness training) and assist them to substitute less harmful actions to express their emotions. Assist them to articulate their emotions and needs. Educate the adolescent and their family (if they agree) that change may be slow, as good mental health is the goal.

Family interventions include encouraging family and friends to be supportive and caring throughout treatment, helping them understand what the adolescent is going through, helping them deal with their guilt and/or remorse, and helping them understand treatment options and community resources. Educate the family that self-injury may continue for years, but often it ends within 5–10 years, as with help the adolescent outgrows these behaviours and learns better coping skills.

**Pharmacologic Interventions**
Occasionally medications may be prescribed by a physician to help control the symptoms.

**Monitoring and Follow-Up**
Follow-up after self-injury is very important. Some adolescents are relieved that someone is willing to talk about it.

**Referral**
Refer to a mental health therapist or psychologist, if the resources are available. Behavioural therapy may be needed to assist them in tolerating more intense emotions while not resorting to self-injury, and to help them maintain this change.

Hospitalization is an artificially safe environment and is not often required.
**PSYCHOSIS** 104, 105, 106, 107

A distortion of reality or loss of contact with reality that affects how one thinks, feels, perceives, and acts.

First incidence of psychosis may occur in adolescence or as a young adult (before age 25). The only difference among sexes, races, and cultures is that males usually experience psychosis at a younger age than females.

For information on what defines psychotic disorders, in particular schizophrenia, the clinical presentation and the management, see the section “Psychotic Disorders and Schizophrenia” in the chapter “Mental Health”.

**CAUSES**

The cause of psychoses is not known, although a number of causes are postulated. Family upbringing, social problems, and/or a “weak” character are not the cause. Use of psychoactive substances (for example, ecstasy, cocaine, LSD) can trigger a psychotic episode in persons predisposed to psychosis.

**HISTORY, PHYSICAL FINDINGS, DIFFERENTIAL DIAGNOSIS, DIAGNOSTIC TESTS, COMPLICATIONS**

The information applying to these topics for a client with psychosis is the same as for a client with schizophrenia, see “History,” “Physical Findings,” “Differential Diagnosis,” “Diagnostic Tests,” and “Complications” under “Schizophrenia” in the chapter “Mental Health.”

**MANAGEMENT**

Outcomes are improved if psychosis is diagnosed early and treatment started promptly. With effective treatment most people recover and go into remission.

All areas of management are the same as for schizophrenia (the acute phase), so refer to these topics under the appropriate “Management” subheader under “Schizophrenia.”

**BIPOLAR DISORDER** 108, 109

For information on what defines bipolar disorder, its clinical presentation and its management, see “Bipolar Disorder” in the chapter “Mental Health.”

Some specific information on adolescent and child bipolar disorder follow.

One must have a high index of suspicion for bipolar disorder in any adolescent presenting with depression, in particular atypical depression and those with a poor response to antidepressants, so as to not miss the diagnosis. 110

Children and adolescents with mania often have atypical symptoms. Many who have labile moods and sleep disturbance meet the DSM-IV criteria, except for the duration of episodes. Adolescents often have:

– Severe deterioration in behaviour
– Mood-incongruent psychotic symptoms
– Mood changes, including psychomotor agitation and mental excitement, that are erratic and not persistent
– Irritable mood and belligerence (more often than euphoria)
– Mixed state features
– Reckless behaviours that include failure at school, fighting, and dangerous play

Bipolar disorder is under-diagnosed in teens. Therefore, consider bipolar disorder if there is a large deterioration in function with mood or psychotic symptoms.

**MANAGEMENT**

**Pharmacologic Interventions**

Often adolescent bipolar disorder, particularly early in the disease, is chronic and refractory to treatment. However, often it will respond to the same medications as those used in adults (for example, lithium, divalproex, olanzapine, risperidone, quetiapine, lamotrigine). 111
**ANXIETY DISORDERS**

For information about anxiety disorders, see “Anxiety Disorders” in the chapter “Mental Health”. Specific considerations for adolescents are noted here, but otherwise follow the adult guidelines.

Anxiety and/or worry are common in normal children. Common, normal worries depend on developmental level, but include fear of the dark; fear of harming a family member; over-concern about competence (for example, school), social contact and health; need for reassurance; somatic complaints; and fear of death. Normally, younger children and females tend to have more anxiety symptoms than older children or males. An anxiety disorder is distinguished from normal worries by having symptoms that persist and having impairment in daily functioning (for example, occupational, social).

Early signs of an anxiety disorder include persistent behavioural inhibition (for example, shyness and avoidance of novelty). This along with risk factors such as family history of mental illness (in particular anxiety), personal history of childhood anxiety, stressful or traumatic event, female, and comorbid psychiatric disorder (in particular depression) are known to be linked to anxiety disorder development (in particular, social phobia during adolescence). Children may express anxiety by crying, experiencing nightmares, physical symptoms (for example, headaches or upset stomach), or in play themes. They may not see that their fear is excessive or unreasonable.

Social phobias and obsessive compulsive disorder are most likely to start during adolescence. Almost 80% of children and adolescents with anxiety disorders have at least one comorbid condition.

Anxiety disorders will resolve in some children. However, others will have it for a long period of time and/or will develop a different anxiety disorder. Children, especially those who do not receive treatment are at greater risk of having other anxiety-related concerns, depression and substance use.

**MANAGEMENT**

*Nonpharmacologic Interventions*

Cognitive behavioural therapy is effective in treating most anxiety disorders in the majority of adolescents. Psychotherapy is often not available, but video conferencing may be available in the community to provide this intervention. It is more effective if parents or guardians are involved. The therapy helps adolescents recognize when they are anxious, and encourages them to practise problem-solving strategies. In mild cases, a physician may only recommend psychotherapy. Psychotherapy also provides general support and education about the disorder and its treatment; encourages one to resolve family matters, treat substance use, and participate in peer support groups; and encourages a healthier lifestyle (for example, routine exercise).

For more information on nonpharmacologic interventions for anxiety disorders, see “Nonpharmacologic Interventions” under “Anxiety Disorders” in the chapter, “Mental Health.”

*Pharmacologic Interventions*

In adolescents and children, drugs should not be the sole form of treatment.

**PROBLEM GAMBLING**

For information about the clinical presentation and management of problem gambling, see “Gambling” under “Mental Health Problems” in the chapter, “Mental Health.” Some specific information on adolescent gambling is below.

High school students gamble two to four times more than the general public. Of Ontario students, 43% reported taking part in gambling activities.

**HISTORY**

The Canadian Adolescent Gambling Inventory (CAGI) instrument from the Canadian Adolescent Gambling Inventory: Phase III Final Report is available online at: [http://www.ccsa.ca/2010%20CCSA%20Documents/CAGI_Survey_Instrument_e.pdf](http://www.ccsa.ca/2010%20CCSA%20Documents/CAGI_Survey_Instrument_e.pdf). It supports the assessment of adolescent gambling problems (for example, types of gambling involved in, frequency, time involved, amount gambled, reasons for gambling and perceptions of gambling activities – for example, luck, control), as well as the psychological and social harms, financial consequences and loss of control related to gambling behaviour.

For other aspects of the history that should be obtained and management, see “Gambling” under “Mental Health Problems” in the chapter, “Mental Health.”
GANG INVOLVEMENT

Gangs are defined as “visible groups that come together for profit-driven criminal activity and severe violence. They identify themselves through the adoption of a name, common brands/colours of clothing, and tattoos to demonstrate gang membership to rival gangs.”

More and more Aboriginal youth are becoming involved in gangs, including on reserves, in some parts of Canada. Of known gang members in Canada, 22% are Aboriginal, with an important distribution in the Prairie provinces. “The increase in gang violence and crime in some Aboriginal communities has been attributed to an increasing youth population, inadequate housing, drug and alcohol abuse, a high unemployment rate, lack of education, poverty, poor parenting skills, the loss of culture, language and identity, and a sense of exclusion.”

Try to develop an understanding of the prevalence of gangs in the community, their local and national boundaries, gang insignia (for example, dress, tattoos, colours), initiation rites and rituals, and who is involved, so as to understand specific risk factors. Police and/or youth workers may be able to help provide this information.

RISK FACTORS

- Negative influences (for example, peers, family) on life
- Little attachment to community
- Over-reliance on antisocial peers
- Poor parental supervision
- Substance use
- Limited educational or job potential
- Need for recognition and belonging
- Abuse and/or neglect
- Multiple child welfare and/or correctional placements
- Mental illness and brain disorders (for example, depression, fetal alcohol spectrum disorder)

HISTORY

Teens are often very hesitant to disclose gang involvement, so a trusting relationship needs to be established and the adolescent needs to be educated about what confidentiality encompasses. Assess:

- Who is involved in a gang (for example, peers, siblings, cousins)

Ask about gang insignia (for example, dress, tattoos, writing or drawings, colours), initiation rites, and rituals for joining or leaving the gang (some may cause harm to self, property, or others)
- Client involvement in a gang
- Access to guns
- Suicidal behaviour (see “History” under the section “Suicidal Behaviour”)

PHYSICAL FINDINGS

Look for gang insignia (for example, dress, tattoos, writing or drawings, colours) and physical evidence from initiation rites and rituals, as some may cause self-harm.

COMPLICATIONS

Aboriginal gangs seem to mainly have “internalized violence” that include suicides, drug overdoses and self-inflicted injuries, but physical violence may escalate and result in young Aboriginal males killing other Aboriginal males.

MANAGEMENT

Nonpharmacologic Interventions

- Encourage those involved in a gang to leave it (to reduce duration of membership) by counselling them individually about their membership
- Provide links to services (for example, drug treatment, education, job opportunities)
- Be positive, reflect on and celebrate small successes

Prevention

- Provide education and counselling to develop strong parenting skills and family units early (before age 6)
- Encourage the development of protective factors, particularly for youth at risk (see “Risk Factors”)
- Encourage positive relationships with mentors and peers
- Encourage positive social environments within homes, the community and community organization
- Develop positive skills and assets
- Multi-component programs seem to be the most successful (for example, involving law enforcement agencies, many social service agencies)
For information about what defines substance abuse, its clinical presentation (for example, physical findings) and its management, see “Substance Abuse” under “Mental Health Problems” in the chapter, “Mental Health.” Some specific information on adolescent substance abuse is given below, but otherwise refer to the adult guidelines.

**ADOLESCENTS AND SUBSTANCE ABUSE**

In Ontario surveys, 3.5% of students in grades 7–12 had used ecstasy one or more times in the preceding year and 2.6% had used cocaine at least once. Increasing numbers of students today use hallucinogens, cannabis, cocaine, and stimulants. Aboriginal youth are more likely than other youth to use solvents and illicit drugs. They are also more likely to start using all substances at a younger age than other youth. All of these issues may be linked to the increasing availability and/or the changing attitudes toward drug use (for example, fewer disapprove of it).

**HISTORY**

All clients should be screened for substance use regularly (for example, at periodic health examinations) as most do not disclose use unless asked directly due to denial. Assure the client confidentiality. Ask for permission to discuss substance use and explain why you are screening.

Screening for substance use and abuse:

- “Any friends use tobacco? alcohol? other drugs, including those bought on the street or in the pharmacy?”
- “Ever feel pressured to use any of these in social situations?”
- Assess for risk factors as described in “Risk Factors” under “Substance Abuse” in the chapter, “Mental Health”
- Assess adolescents and young adults for risk for substance use problem or disorder with the CRAFT mnemonic. Two or more “yes” answers put a client at high risk for a substance abuse problem and requires further assessment:
  - Ever rode in a Car driven by someone who had been using drugs or alcohol
  - Ever use drugs or alcohol to Relax, to increase your self-esteem or to fit in with peers
  - Ever use drugs or alcohol when Alone
  - Forget activities done while using drugs or alcohol
  - Family or Friends ever tell you to cut down on alcohol or drug use
  - Ever been in Trouble while using drugs or alcohol
  - Screen for tobacco use,! alcohol use (including beer and homebrew), and drug use (for example, prescription, illegal, inhalant). One method of screening for drug abuse (not alcohol or nicotine use) in adolescents is the Drug Abuse Screening Test (DAST-20) Adolescent version. It is able to quantify the degree of problem related to drug use and misuse by either client self-report or through an interview. It takes approximately 5 minutes to complete. The DAST-20 is copyrighted, but can be copied for clinical use if the author is credited. PDF versions of the test, including a guideline on how to use the test can be downloaded from the European Monitoring Centre for Drugs and Drug Addictions website at: http://www.emcdda.europa.eu/html.cfm/index3618EN.html
- Ask family and/or friends about drastic changes in behaviour (for example, not telling others where they are going) or known/suspected substance use, if the client agrees
- Anyone at home use tobacco

**Substance Users**

- Assess clients who admit to substance use further by taking the history for Substance Users as described under “Substance Abuse” in the chapter, “Mental Health”

**MANAGEMENT**

**Goals of Treatment**

- Client tells their parent(s) about their substance abuse behaviour(s)
- Behaviour change (for example, facilitate treatment and prevent relapse)
- Assess for and treat comorbid conditions, including medical and mental health
Nonpharmacologic Interventions

All adolescents (even if they do not use substances):
- Emphasize how substances can affect things important to teens (for example, appearance, health)
- Explain the risks and consequences of using substances (both legal and illegal), emphasizing that anyone (including teens) can develop a drug use problem
- Help them plan how to handle scenarios where peer pressure may take place
- Counsel about tobacco use, under-age drinking, and illicit drug use. Advise teens to avoid binge drinking and smoking
- Support adult role models of the adolescent and provide age-appropriate guidance about supervision

Other nonpharmacologic interventions that apply to adolescents are outlined under “Nonpharmacologic Interventions” under “Substance Abuse” in the chapter, “Mental Health.”

ALCOHOL ABUSE

For information about what defines alcohol abuse and acute alcohol withdrawal, their clinical presentation and their management, see “Alcohol Abuse” and “Acute Alcohol Withdrawal” in the chapter, “Mental Health.”

Some specific information on adolescent alcohol abuse is presented below. Refer to the “History” and general “Management” sections for substance abuse in this chapter or the adult guidelines for more options.

Of Ontario students in grades 7–12, 62% drank at least once in the past year, 10% drank once a week, and 25% of males and 20% of females binge drank in the past month. One-seventh of students drink and drive and one-third were a passenger with a drunk driver. Compared to other adolescents, Aboriginal youth are 2–6 times more likely to have every alcohol-related problem.

NICOTINE DEPENDENCE

For information about what defines nicotine dependence, its clinical presentation and its management, see “Nicotine Dependence” in the chapter, “Mental Health.”

Some specific information on adolescent nicotine dependence is presented below. Refer to the “History” and general “Management” sections for adolescent substance abuse or the adult guidelines for more options.

Of Aboriginal youth 15–17 years old, 47% of boys and 61% of girls smoke, which is approximately three times the national prevalence. One Manitoba community found that 82% of those 15–19 years old were current smokers. Aboriginal youth may start smoking as early as the pre-teen years.

HISTORY

Screen adolescents and children for nicotine use beginning at age 10 [earlier if the child is at risk (for example, parent smokes), or use is suspected] and for second-hand smoke exposure at every visit during childhood and adolescence. Use language that is appropriate for youth (for example, puffing, trying, daily use).

MANAGEMENT

Intervene with all youth who are at risk (for example, had first puff) for sustained tobacco use (for example, encourage cessation), hopefully before the habit becomes ingrained.

Nonpharmacologic Interventions

- Children and adolescents should be given strong messages to totally abstain from tobacco products
- Counselling strategies are very effective with adolescents
- Give adolescents and children helpline numbers and website addresses for online resources (see “Nonpharmacologic Interventions” under “Nicotine Dependence” in the chapter, “Mental Health”)
- Some useful web-based and other resources specific to youth can be found in the CAN-ADAPTT Canadian Smoking Cessation Guideline (available at: http://www.can-adaptt.net/English/Guideline/Youth%20(Children%20and%20Adolescents)/Home.aspx) Specific populations: Youth (children and adolescents)

Pharmacologic Interventions

Consult with a physician to prescribe a smoking cessation aid appropriate for adolescents. Evidenced-based choices for this population are nicotine substitution interventions (for example, patch, gum). Note that these are covered by Non-Insured Health Benefits with annual limits.
MARIJUANA (CANNABIS) USE

For information about what defines marijuana use, its clinical presentation and its management, see “Marijuana (Cannabis) Use” in the chapter “Mental Health”. Some history and general management options for adolescent substance abuse are above.

INHALANT ABUSE

Purposely inhaling a volatile substance to produce an altered mental state. It is also known as volatile substance abuse, solvent abuse, sniffing, huffing (inhaling through a soaked cloth held over the nose and mouth) and bagging (inhaling from a plastic or paper bag). See “Substance Abuse” in the chapter, “Mental Health” for the criteria for inhalant (substance) abuse and dependence.

Inhalants rapidly reach the brain due to fast pulmonary absorption and lipid solubility. There are 3 categories of inhalants:

- Aliphatic, aromatic or halogenated hydrocarbons (for example, model glue, contact cement, lacquers, gasoline, propane, cigarette lighter fluid, paint thinner, cooking sprays, electronic cleaning sprays, air fresheners, hairspray, deodorants, cleaning fluids, cologne)
- Nitrous oxide (for example, whipping cream aerosols, balloon tanks)
- Volatile alkyl nitrites (for example, room odourizers, videocassette recorder head cleaners, angina medications)

Dozens of inhalants are available in stores: they are legal, inexpensive, and easy to obtain. This makes them easier to be abused by young children. Many think of them as “kids’ drugs” not realizing the significant morbidity and mortality that inhalants can cause. An American study found that the most commonly abused inhalants from most to least were gasoline, paint, propane/butane, air fresheners and formalin.

Inhalants are most often used by younger adolescents. One study found that 20% of Aboriginal youth and 33% of Aboriginals under age 15 use inhalants; 50% begin before age 11. Many individuals try inhalants only once or twice. Most inhalant users are between ages 10 and 16. Use typically declines in the later teens, but some individuals continue abusing as adults. Many report inhalants as their first drug of abuse.

RISK FACTORS

- Aboriginal community member
- Rural or isolated community with high percentage of unemployment, poverty, and violence
- Abuse of other substances
- See other risk factors for substance abuse in the chapter, “Mental Health”

HISTORY

Screen all youth, beginning before age 10, for inhalant abuse.

Refer to the “History” in the section “Substance Abuse” that can be used for all substance users above. In addition to those questions, ask friends and family, if possible, about:

- Adolescent storing large quantities of inhalants in uncommon places (for example, under a bed)
- Changes in the individual (for example, poor hygiene, weight loss, fatigue, nosebleeds, excessive thirst, conjunctivitis, muscle weakness, nausea, apathy, poor appetite, gastrointestinal complaints, changes in school attendance and/or psychological/psychiatric changes such as difficulty concentrating)

PHYSICAL FINDINGS

Refer to the “Physical Findings” that can be used for all substance users in the chapter, “Mental Health.” In addition, do a neurological examination.

Chronic inhalant abusers have clear signs of their addiction:

- Odour on the breath that can be present for hours
- Stains, paint, glitter and/or odour on skin or clothing
- Perioral dryness or pyodermas
- “Huffer’s rash” (can be yellow if they abuse nitrites)
- Facial, oral, nasal or esophagopharyngeal freezing or burning
- Conjunctivitis
- Sores in the nose and mouth
- Pale skin

Occasionally:

- Edema of lips, oropharynx and trachea
- Confusion, moodiness or irritability
- Wheezing, dyspnea
- Ataxia, tremor, nystagmus
COMPLICATIONS

Acute depression of the central nervous system can result, causing feelings of invincibility, and there is a strong potential for accidents, such as burns or drowning.

- Gastrointestinal concerns (for example, nausea, vomiting, indigestion, stomach ulcers, diarrhea)
- Headache
- Sinusitis, nosebleeds
- Dizziness, hallucinations, delusions, blurred vision, tiredness
- Neurological symptoms (for example, ataxia, slow reactions, slurred speech, tremor, hearing loss)
- Cognitive problems (for example, disorientation, memory loss, confusion)
- Depression
- Weakness
- Coma, seizures, delirium
- Unpredictable behaviour (for example, irritability, accidents, injury, aggression)
- Death (related to heart failure). Sudden sniffing death is rare, but it is the leading cause of death among inhalant abusers. It is the result of rapid nasal or pulmonary absorption of the inhalant, which sensitizes the heart to arrhythmias (generally fatal ventricular arrhythmias) and to adrenaline (being started during inhalation can cause death). Aspiration and suffocation also cause death, particularly in those who are “bagging.” Respiratory arrest and vagal depression are other potential causes of death

Long-term use:

- Kidney, heart, lung and liver damage, immune impairment, bone marrow toxicity, and fetal solvent syndrome
- Irreversible neurological and neuropsychological damage. This includes cortical atrophy and brainstem dysfunction

DIAGNOSTIC TESTING

No diagnostic tests, including urine screening, are usually helpful to diagnose and/or detect inhalant abuse.

Urinary testing for metabolites of some solvents (for example, benzene, toluene, xylene, and chlorinated solvents) may be used to monitor treatment compliance; however, consult a physician prior to ordering this test.

MANAGEMENT

Inhalant abusers often do not receive medical attention unless there is a related injury or serious illness. Refer to the most appropriate section of the clinical practice guidelines to deal with the most immediate concerns first (for example, arrhythmias, hypotension).

Appropriate Consultation

Consultation with a poison control centre and/or a physician is indicated for acute intoxication.

Nonpharmacologic Interventions

Refer to “Nonpharmacologic Interventions” that can be used for all substance users, above, and in the chapter, “Mental Health.” In addition to those:

- Decontaminate skin and clothing, if needed
- Acute inhalant intoxication and withdrawal requires very vigilant and supportive care. Withdrawal signs and symptoms may influence care (for example, pharmacologic treatment for nausea may be needed)
- Refer to a National Youth Solvent Abuse Program (NYSAP) treatment centre (available at: http://www.hc-sc.gc.ca/fniah-spnia/substan/ads/nysap-pnlaad-eng.php). These programs help abusers regain social skills, help with detoxification, use peer-client advocates, help the individual develop strengths and skills, and assist the adolescent to reintegrate into the community. These centres are listed in the Treatment Centre Directory (available at: http://www.hc-sc.gc.ca/fniah-spnia/substan/ads/nnadap-pnlaada_dir-rep-eng.php)

- Be available once an adolescent returns from a treatment program and facilitate the development of a positive relationship with their family and the development of social skills
- Offer family counselling to help parents reinforce and enforce appropriate behaviours, if this is not covered in a treatment program, and if the client agrees
– Educate clients about inhalants:
  – Handout on inhalants from the Aboriginal Healing Foundation; see page 82 to 83 of Addictive Behaviours among Aboriginal People in Canada (available at: http://www.ahf.ca/publications/research-series)
  – Sunshine Coast Health Centre website lists a number of book- and web-based resources on solvents for clients and care providers (available at: http://www.sunshinecoasthealthcentre.ca/inhalants-solvents.html)

PREVENTION

– Educate children, adolescents, parents, teachers and community members that even casual substance abuse is dangerous
– Screen youth widely for inhalant abuse, as early referrals to treatment programs results in the adolescent having improved physical, mental and social health
– Educate children, adolescents, parents, peers, counsellors and the community about what products may be abused, the signs and dangers of inhalant abuse, and what to do if someone is suspected to be abusing
– Offer in-school education programs early, prior to the age when some children start experimenting with inhaling (for example, start in early elementary school)
– Advocate for the social determinants of health to be addressed within the community, businesses, and the government, as poverty, hunger, illness, low education, and unemployment is linked to inhalant abuse
– Ensure access to effective family-based treatment programs

PRESCRIPTION DRUG ABUSE

For information about what defines prescription drug abuse, its clinical presentation and its management, see “Prescription Drug Abuse” in the chapter “Mental Health.” Some specific information on adolescent prescription drug abuse is presented below. Refer to the history and general management sections for adolescent substance abuse or the adult guidelines for more options.

Of students in grades 7–12, 21% stated they took a prescription opioid in the last year for nonmedical purposes and 75% stated the drug was in their home. The number of youth using OxyContin doubled within 2 years after 2005. Opioid abuse is the third most common substance of abuse after alcohol and marijuana.

CAUSES

The research on adolescent abuse of opioids is just starting to be done. It is uncertain what is motivating this problem (for example, is it a substitution for other illicit drugs, is it for self-medicating effects, is it increasingly available in homes). In some areas, part of the problem is due to drug diversion, where prescription drugs make their way to dealers who sell them for profit.
RESOURCES FOR ADOLESCENT CLIENTS AND/OR THEIR FAMILIES

Centre for Addiction and Mental Health Information about children, youth and families: Books and pamphlets; 2009. Available at: http://www.camh.net/About_Addiction_Mental_Health/Child_Youth_Family_Resources/youth_books_pamphlets.html

Centre for Addiction and Mental Health. Resources for your patients and their families; 2009 (includes Mental Health and Addiction 101 online tutorials, and information on mental illnesses and substance use; some are written for youth). Available at: http://knowledgex.camh.net/primary_care/resources_families/Pages/default.aspx


Kids Help Phone – 24 hour anonymous telephone counselling, referral and internet service for children and youth, at 1-899-668-6868 or at: www.kidshelpphone.ca

Lesbian Gay Bi Trans Youth Line – confidential, free and non-judgmental peer support and referral services, at 1-800-268-9688, or at: www.youthline.ca

Ontario Drug and Alcohol Registry of Treatment (for Ontario resources) at 1-800-565-8603 or at: www.dart.on.ca

Sexuality and U – website for teens about sexuality topics from the Society of Obstetricians and Gynaecologists of Canada. Available at: http://sexualityandu.ca/en

BOOKS AND MONOGRAPHS


Bickley, LS. Bates’ guide to physical examination and history taking. 10th ed. Baltimore, MD: Lippincott Williams & Wilkins; 2009.


INTERNET GUIDELINES


Addiction issues: Addiction risk screening; n.d. Available at: http://www.paincare.ca/professional/addiction/addiction_risk_screening/


Canadian Paediatric Society. *Adolescent Health Publications and Resources*; 2010. Site has many positions statements. Available at: http://www.cps.ca/english/publications/AdolesHealth.htm#statements


Centre for Addiction and Mental Health. *Adolescent mental health, resilience and Ontario data*; 2006. Available at: http://www.camh.net/Publications/Resources_for_Professionals/YDMH/ydmh_chapter1_part3.html

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Centre for Addiction and Mental Health. *Resources for your patients and their families*; 2009. Available at: http://knowledgex.camh.net/primary_care/resources_families/Pages/default.aspx

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Collaborative Mental Health Care in Canada. *Collaborative mental health care; n.d.* Available at: http://www.shared-care.ca/


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ENDNOTES


2 South Carolina Department of Mental Health. *Get the facts on mental illness: Adolescent development*. n.d. Available at: http://www.state.sc.us/dmh/adolescent_facts.htm


4 Centers for Disease Control and Prevention. (2010). *Child development: Middle adolescence (15-17 years old)*. Available at: http://www.cdc.gov/ncbddd/child/middleadolescence15-17.htm

5 Canadian Paediatric Society, Caring for Kids. *Growing up: Information for girls about puberty*. Available at: http://www.cps.ca/caringforkids/teenhealth/growingupgirls.htm


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