Sexual Abuse in Peripubertal and Prepubertal Children

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Background

Canadian Law regarding Age of Consent to Sexual Activity (at the time of publication)

Canadian law is fairly nuanced in respect to defining the points at which sexual activities involving persons under the age of 18 become criminal offences.[1] Depending on the circumstances, any form of touching for a sexual purpose can constitute an offence. Consent is the key factor in determining whether any form of sexual activity is a criminal offence. The law recognizes some minors as having the ability to consent, in some situations. Generally speaking, persons over 14 are recognized as being able to give consent to participate in sexual activities, unless the activities are taking place in a relationship where one participant has some authority over or is in a position of trust in relation to the other person, where there is dependency, or where there is exploitation of one participant by the other. The *Criminal Code* provides a "close in age" exception: a 12 or 13 year old can consent to engage in sexual activity with another person who is less than two years older and with whom there is no relationship of trust, authority, dependency, or exploitation. Children under 12 do not have the legal capacity to consent to any form of sexual activity.

Definition

The definition of sexual abuse varies, but involves all sexual acts that the child cannot comprehend, for which the child is not developmentally prepared and/or cannot give consent to, and/or that violates the law.[2] Activities may range from fondling to penetration. For the purpose of these guidelines, as is relevant to the potential transmission of sexually transmitted infections (STIs), the definition will include complete or partial penetration by a penis of the mouth, anus and/or vagina, although it is noted that contact of the mouth with the external genitalia or anus could potentially transmit herpes simplex virus (HSV) infections.

In addition, for the purpose of these guidelines, peripubertal refers to individuals aged 11–13 and prepubertal to individuals less than 11 years of age.

Epidemiology

It is difficult to accurately estimate the prevalence of sexual abuse due to underreporting. The reported prevalence varies from study to study, depending on a number of factors. This form of abuse affects children of all ages, socioeconomic classes and geographic locations.[3] Some studies estimate that approximately 1% of children experience some form of sexual abuse each year, resulting in sexual victimization of 12–25% of girls and 8–10% of boys by age 18.[4] The perpetrator may be a member of a child's family or a complete stranger, but in either case the abuser is often an adult male (adolescents may be the perpetrators in as many as 20% of all cases). Boys may be abused as often as girls, but they are less likely to report the abuse.

The *Canadian Incidence Study of Reported Child Abuse and Neglect*[5] estimated that 135,573 child maltreatment investigations were carried out in Canada in 1998, an annual incidence rate of 21.52 investigations per 1,000 children. Ten percent (15,614 or 2.48 investigations per 1,000 children) of these investigations involved sexual abuse as the primary reason for investigation.

Of these, an estimated 2,742 child investigations involved allegations of oral, vaginal or anal sexual activities. Non-parental figures were most often investigated in sexual abuse cases, with non-parental relatives representing 28%, biological fathers 15% and stepfathers 9% of all cases. Seven percent of sexual abuse investigations involved mothers as alleged perpetrators (5% biological mothers and 2% stepmothers). Sixty-eight percent (~9,813 cases) involved female children, with adolescent females aged 12–15 accounting for 21% of investigations and girls 4–7 years accounting for 23%.

Multiple factors affect the risk of transmission of infection with sexual abuse, including the following:[6–9]

- Prevalence of STIs within the local population.
- Type of sexual activity: the risk of STI transmission with penile-rectal penetration is greater than penile-vaginal penetration, which is greater than penile-oral penetration etc.
- Degree of trauma: injuries to the genital tract are more common in children.
- Sexual maturity of the child: altered susceptibility to STIs due to maturational differences in the genital tract.
- Lack of use of barrier contraception.
- Multiple episodes of abuse.

Prevention

Children should be screened throughout childhood, during routine visits to health care providers' offices, for evidence of sexual abuse. Children who may be at higher risk include those with developmental, behavioural and medical problems.[10,11] Health care providers should also be aware that recognizing and reporting child sexual abuse is the most effective means of preventing further abuse, reactive abuse and pedophilia.[12–15]

Evaluation

Sexually abused children may present in many ways. They may present alone or with their parents for evaluation of alleged sexual abuse. They may present at a health care provider's office with an unrelated complaint and then disclose abuse. The health care provider may even suspect abuse during a routine visit, highlighting the need for vigilance, because abuse may present in ways that may be so non-specific that the problem may not be considered.[16–18] Rectal or genital bleeding, the presence of STIs and developmentally unusual sexual behaviour are some of the more specific signs of sexual abuse.[19]

Victims of sexual assault may be reluctant to disclose that they have been sexually assaulted for a variety of reasons, including being coerced into secrecy, fear of not being believed or fear of retribution. In some instances, children may not recognize that abuse has taken place.

Assessment and follow-up of children who are victims of sexual abuse should be carried out with great sensitivity and ideally with the direct involvement of experienced teams or services (see *Appendix G*). When direct referral cannot be made (e.g., in remote areas), every effort should be made to consult with the nearest referral centre.

Health care providers who suspect the occurrence or possibility of sexual abuse should inform the parents/guardians in a calm, non-accusatory manner.[2] Health care providers need to be aware of local reporting requirements (see *Reporting and Partner Notification,* below).

The health care provider's role is not to conduct a legal interview or obtain details of the abuse from the child, but rather to do the following:[20]

1. Take a pertinent medical history.
2. Ensure the physical and emotional well-being of the patient.
3. Treat or prevent illness or injury.
4. Accurately record spontaneous disclosure or volunteered information.
5. Obtain and document physical findings consistent with abuse or suspicions of abuse.
6. Inform the child and caregivers about the medical outcome of the investigation.
7. Assist child protection and law enforcement agencies in their investigation.

History

When a health care provider suspects abuse, it is essential he/she take a pertinent medical history to satisfy the medical needs of the child and generate adequate information to assist child protection agencies.

When direct referral to specialist referral centre is not possible (e.g., in remote areas), several methods may be used when asking young children about abuse.[21] The child may also spontaneously provide information. If possible, the child should be interviewed alone, although the presence of a non-threatening caregiver may be appropriate. In addition, the parents/guardians may provide a history of behavioural changes that may be relevant to the situation.

Physical exam

The following information is provided as a guide and may be useful when screening for the possibility of sexual abuse. A full evaluation should ideally be performed by a clinician experienced in this area.

Injuries requiring immediate attention should take precedence over any other examination. The physical examination should be explained to the child before it is performed and should not result in additional emotional trauma.

A complete pediatric examination should be performed, with special attention paid to the growth parameters and sexual development of the child using Tanner staging (see *Appendix H*). Injuries and other evidence of abuse should be documented, including bruising, swelling and areas of tenderness. **If the abuse has occurred within 72 hours, or if there is bleeding or acute injury, the examination should be performed immediately so that forensic specimens can be collected.**[2] After 72 hours has passed and when no acute injuries are evident, then the evaluation should be performed when convenient for the child and investigative team.

Careful examination of all areas involved in sexual activity should be performed and notes made of any abnormalities. Examination of the genital and rectal areas may be aided by instruments that illuminate and/or magnify the area. In both sexes, the anus should be examined, and in females the hymenal opening should be examined. Digital and speculum examination is not usually necessary and should not be performed in prepubertal children.

Specimen Collection and Laboratory Diagnosis

For prepubertal children, the decision to perform testing should be done on an individual basis. The following situations put the child at higher risk for STIs and are indications for testing:[22]

- The child has symptoms or signs of an STI (e.g., vaginal discharge or pain, genital itching or odour, urinary symptoms, genital ulcers or lesions).
- The suspected assailant is known to have an STI or to be at risk for an STI.
- Another child or adult in the household is known to have an STI.
- The prevalence of STIs in the community is high.
- There is evidence of genital, oral or anal penetration.

If testing is warranted, an experienced clinician (ideally one involved with a referral centre) should be consulted; the testing procedures described below are intended as a guide and for information only.

Minimal investigation should include testing for *Neisseria gonorrhoeae* and *Chlamydia trachomatis,* and if genital ulcers are present, for herpes simplex virus and syphilis. The genital organs of female infants, children and adolescents vary significantly from those of adults, influencing the microbiological flora of the genital tract and sampling sites for screening. Sampling sites need to be specific for the sexual maturity of the young person. Speculum examinations should not be performed on prepubertal children.

The health care provider may elect to use several techniques, including the use of small swabs (such as urethral or ear, nose and throat swabs) moistened with sterile saline for transhymenal vaginal sampling. Placing the child in the prone knee-chest position allows cultures to be taken without touching the hymen and causing pain and without the child being alarmed by the sight of the swab.[23] Vulvar or vaginal washings are also suitable (see *Table 1*).

All specimens for forensic evidence should be collected by professionals experienced in these procedures and should follow established regional/local protocols (see *Appendix F*).

It should be noted that most forensic kits do not contain tests for STIs or blood-borne pathogens. They are useful in the identification of semen or other body fluids, forensic DNA analysis, microscopic hair examination, textile damage assessment and examinations involving fibres and other types of trace evidence. These, in turn, may be used to establish that some form of association occurred between the victim and the accused, that sexual contact occurred and/or that the assault was violent or forceful, thereby indicating lack of consent. All isolates and specimens should be retained in case additional or repeated testing is required.

Table 1. Initial visit: prepubertal children

Specimen type by gender	Condition or organism to be detected
Boys and Girls Urine • First-catch urine (10–20 mL) after not voiding for 2 hours	• A molecular diagnostic test, preferably a NAAT, should be collected for gonorrhea and chlamydia. This test is generally more sensitive than genital culture and may be acceptable for medico-legal purposes if confirmed by a second set of primers or, in some cases, a second test sent to another laboratory Postexposure NAAT testing can be taken at the time of presentation, without needing to wait for 48 hours after exposure; this is based on expert opinion, which assumes that NAATs are able to detect inoculum (DNA or RNA).
Girls Vagina, vestibule or discharge (if present) • 1 urethral swab, premoistened with sterile water (to minimize discomfort)* • Vaginal wash† technique preferred to multiple vaginal swabs if NAAT used for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*	• Gram stain, if available, for abnormal bacterial flora, bacterial vaginosis, candidiasis, gonorrhea should be taken • Molecular diagnostic tests, especially NAATs, are more sensitive than culture for *C. trachomatis* and *N. gonorrhoeae* • Cultures have been the preferred method for medico-legal purposes, but NAATs may be acceptable if positive results are confirmed by a second set of primers or, in some cases, a second test sent to another laboratory • If available, both tests (culture and NAAT) should be taken • If available, wet mount and/or culture for *T. vaginalis* should be taken Since culture tests collected <48 hours after exposure may be falsely negative, they should be repeated 1–2 weeks after exposure if prophylaxis is not offered; a postexposure NAAT can be taken at the time of presentation without waiting for 48 hours; this is based on expert opinion, which assumes that NAATs are able to detect inoculum (DNA or RNA).

*Vaginal specimens can be taken without a speculum in a relaxed child as long as the hymenal ring is not touched. A small swab, (e.g., urethral swab) is preferred. Speculum examination is only rarely required, and in prepubertal females requires consultation with a specialist or may require a general anesthetic.

†Vaginal washes are performed by instilling 1.5–2 mL of sterile, preservative-free normal saline at room temperature into the vagina via a modification of the method described by Pokorny and Stormer.[24,25] The tubing from a 25 mm butterfly needle, with the needle and butterfly wings removed, is inserted into the distal end of a No. 8 bladder catheter. This assembly is then attached to a 3 mL syringe by the end of the butterfly tubing. This system allows for aspiration of the vaginal contents without the end of the butterfly tube becoming occluded by the vaginal walls. The normal saline and vaginal discharge fluid are then aspirated from the vagina.

Table 1. Initial visit: prepubertal children (continued)

Specimen type by gender	Condition or organism to be detected
Boys Meatus • 1 urethral swab, premoistened in sterile water for meatal specimen; intraurethral specimen not recommended	• Gram stain for gonococcal urethritis should be taken • Molecular diagnostic tests, especially NAATs, are more sensitive than culture for *C. trachomatis* and *N. gonorrhoeae* • Cultures have been the preferred method for medico-legal purposes, but NAATs may be acceptable if positive results are confirmed by a second set of primers or, in some cases, a second test sent to another laboratory • If available, both tests (culture and NAAT) should be taken • If available, wet mount and/or culture for *T. vaginalis* should be taken Since culture tests collected <48 hours after exposure may be falsely negative, they should be repeated 1–2 weeks after exposure if prophylaxis is not offered; a postexposure NAAT can be taken at the time of presentation without waiting for 48 hours; this is based on expert opinion, which assumes that NAATs are able to detect inoculum (DNA or RNA).
Pharynx • 1 swab	• *N. gonorrhoeae* culture should be taken • Test for *C. trachomatis* by culture if available; note that organisms can be detected in oropharynx from perinatal transmission for up to 6 months following birth • No approved NAAT for throat specimens
Rectum • 1–2 swabs	• *N. gonorrhoeae* and *C. trachomatis* culture should be taken; no approved NAATs at present • HSV culture should be taken (if inflammation present)
Genital ulcers • 1 swab	• HSV culture should be taken • *Treponema pallidum* direct test should be taken (see *Syphilis* chapter)

HSV=herpes simplex virus

Table 1. Initial visit: prepubertal children (continued)

Specimen type by gender	Condition or organism to be detected
Serologic specimens	Syphilis • Consider screening test(s) for syphilis‡ • Syphilis tests should be repeated at 12 and 24 weeks after exposure. In some instances (e.g., high-risk assailant; see the *Syphilis* chapter) and in areas experiencing outbreaks of syphilis, it may be appropriate to repeat tests 2–4 weeks post-assault Hepatitis B • If the child is known to be immune to hepatitis B (HBsAb ≥10 IU/L) or HBsAg-positive, then no testing is required • Baseline antibodies to HBsAg should be collected when hepatitis B immune status is unknown HIV • Baseline HIV antibody testing should be collected • HIV antibody testing should be repeated at 6, 12 and 24 weeks following significant exposures Hepatitis C • Baseline HCV antibody is optional, since transmission of HCV is low via sexual contact. It may be considered if the (alleged) perpetrator(s) is/are at high risk for hepatitis C (e.g., known injection drug user[s]) and significant trauma has occurred with the assault • If baseline testing has been performed and is negative, HCV antibody testing should be repeated at 12 and 24 weeks following significant exposures

HBsAb=hepatitis B surface antibody
HBsAg=hepatitis B surface antigen
HCV=hepatitis C virus
‡Baseline screening for syphilis should be considered in areas with high prevalence or regional outbreaks of syphilis, foreign-born children, parents/family members/perpetrators diagnosed with syphilis and children diagnosed with another STI.[26]

Table 2. Implications of a diagnosis of STIs for a diagnosis of sexual abuse[2,9]

Incubation period of infection	Probability of abuse	Mother-to-child transmission
Gonorrhea: 2–7 days	Strong; probable if child >1 year	Can be seen in children from 0–6 months of age
Chlamydia: 1–3 weeks, but up to 6 weeks	Probable; strong if child >3 years	Can be seen in children up to 3 years of age
HSV: 2–14 days	Probable	Can be seen in children up to 3 months of age
Trichomoniasis: 1–4 weeks	Strong if child >6 months	Can be seen in children 0–6 months of age
HPV: ≥1 month	Possible; probable if >2 years	Can be seen in children from 0–2 years of age
Syphilis: up to 90 days	Strong	Must be excluded
HIV: up to 6 months, but the majority seroconvert within 4–12 weeks	Possible	Must be excluded
Hepatitis B: up to 3 months	Possible	Must be excluded

HSV=herpes simplex virus
HPV=human papillomavirus

Management and Treatment

Considerations for prophylaxis

- Offer prophylaxis if:
  - The patient presents within 48 hours after an assault.
  - It is requested by a parent/patient/guardian.
  - The patient is at high risk for an STI (see *Specimen Collection and Laboratory Diagnosis*, above).
- It should be noted that the efficacy of antibiotic prophylaxis has not been studied in sexual assault; prophylaxis should be as recommended for treatment of specific infections. See chapters on specific infections for more information.

Table 3. Recommended prophylaxis for uncomplicated urogenital infections

See chapters on specific infections for alternate treatment choices and non-genital infections

Sexually transmitted infection	Recommended prophylaxis
Gonorrhea	• ≤45 kg: **cefixime** 8 mg/kg PO in a single dose (max 400 mg PO)*† *[A-I]* • >45 kg: **cefixime** 400 mg PO in a single dose*† *[A-II]*
Chlamydia	• ≤45 kg: **azithromycin** 15 mg/kg PO in a single dose (max 1 g) *[A-I]* • >45 kg: **azithromycin** 1 g PO in a single dose *[A-I]*
Trichomoniasis	• Treat only if positive for trichomonas • ≤45 kg: **metronidazole** 30 mg/kg/day PO divided every 6–12 hours for 1 week *[B-III]* • >45 kg: **metronidazole** 2 g PO as a single dose[27] *[A-I]*
Syphilis	• Prophylaxis with azithromycin (given for prophylaxis against chlamydia) is no longer considered to be effective against incubating syphilis in light of the recent emergence of syphilis resistant to azithromycin. Prophylaxis with other agents may be considered if the patient is unlikely to return or there is a potentially high-risk source in an area experiencing an outbreak of infectious syphilis (see *Syphilis* chapter for more information) • If the child subsequently has reactive syphilis serology, he/she should be retreated with a recommended treatment for syphilis

* Cefixime should not be given to persons with cephalosporin allergy or a history of immediate and/or anaphylactic reactions to penicillins.

† Treatment for gonorrhea should be accompanied by treatment for chlamydia unless a NAAT is negative for chlamydia.

Table 3. Recommended prophylaxis for uncomplicated urogenital infections (continued)

Sexually transmitted infection	Recommended prophylaxis
Hepatitis B	• Prophylaxis for hepatitis B should be considered in all cases of sexual assault/abuse where the sexual acts have included anal or vaginal penetration or oral-anal contact without a condom, or if condom status is unknown and the source is not immune to hepatitis B (see *Table 1*). Oral-genital and oral-oral contact do not appear to be significant modes of transmission[28] • Recommended prophylaxis as outlined in the *Canadian Immunization Guide*, 2002,[29] includes the following: – **HBIG** 0.06 mL/kg IM up to 14 days after exposure – A 3-dose course of **hepatitis B vaccine** at 0, 1 and 6 months following exposure or on an accelerated schedule
Hepatitis C	• No PEP available
HIV	• HIV PEP is recommended when the assailant is known to be HIV-infected and significant exposure has occurred (e.g., oral, anal and/or vaginal penetration without a condom or condom status unknown/broken)[30] • PEP may also be available on a case-by-case basis for other high-risk exposures (e.g., source a known injection drug user, multiple assailants and/or significant injury) and vaginal, anal or oral penetration has occurred • Recommendations vary by province, and the decision to offer PEP should be made in conjunction with a pediatric HIV specialist • If HIV PEP is used, it should be started as soon as possible — no later than 72 hours after the assault — and continued for 28 days[30]

HBIG = hepatitis B immune globulin; PEP = postexposure prophylaxis

Pregnancy

- See the *Pregnancy* section in the *Sexual Assault in Postpubertal Adolescents and Adults* chapter.

Other management issues

- Appropriate referral should be made as necessary and available (e.g., to child protection authorities, sexual assault teams, local police/Royal Canadian Mounted Police, psychological support, local victim support organizations etc.).
- Consideration should be given to assessing other children in the family or setting where the abuse is thought to have occurred, as it is not unusual to find other children who have also been sexually abused.[5]
- If the patient is sexually active, advise of the need to practice safer-sex or abstain from sexual intercourse until infection has been ruled out and/or prophylaxis is complete.
- Offer tetanus toxoid if relevant (e.g., dirty wounds/abrasions sustained outdoors) and the child's immunization schedule is not up to date.

Reporting and Partner Notification

- **Every province and territory has statutes in place that require the reporting of child abuse.** Although the exact requirements may differ by province/territory, health care professionals should be aware of local reporting requirements and procedures with respect to child abuse and other acts of maltreatment. If reasonable cause to suspect child abuse exists, local child protection services and/or law enforcement agencies must be contacted promptly.
- **All persons named as suspects in child sexual abuse cases should be located and clinically evaluated; prophylactic treatment may or may not be offered and the decision to treat or not should be based on history, clinical findings and test results (See *Sexual abuse in Peripubertal and Prepubertal Children* chapter).**
- An individual with a confirmed notifiable STI should be reported to provincial/territorial authorities as appropriate.
- Partner notification of individuals found to be infected with an STI should follow the recommendations in the relevant chapter.

Follow-up

- **Follow-up tests of cure are recommended for all curable STIs identified in peripubertal and prepubertal children.** Follow-up will vary depending on the type of test performed and the type and duration of treatment given. In general, nucleic acid amplification tests should be repeated 3–4 weeks after completion of treatment and culture tests 4–5 days after completion of treatment.
- If no prophylaxis was taken, follow-up should be arranged for 7–14 days after the original visit to review available laboratory test results and repeat an STI screen to detect infections acquired at the time of the assault that were not detected at the initial examination.
- If empiric prophylactic therapy was given, follow-up should be arranged at 3–4 weeks.
- Arrange follow-up serologic testing for HIV, hepatitis B and C, and syphilis as required (see *Table 1*).
- Review mental state and arrange appropriate referral to mental health services if necessary.
- Psychological and social support should also be offered to affected family members.