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In dealing with cases of sexual assault, multiple factors need to be considered in each case, before a decision is made regarding the use of human immunodeficiency virus (HIV) post-exposure prophylaxis (PEP). Generally the occurrence of transmission under these circumstances is thought to be low (U.S. Centers for Disease Control and Prevention, 2010). The following factors are pertinent to the decision making process:

- the known or unknown HIV status of the assailant(s):
- the risk profile of the assailant(s);
- the nature and extent of mucosal exposure that occurred;
- the presence of clinical conditions that may enhance transmission such as lacerations • or sexual transmitted infections (STIs);
- the possibility of multiple events particularly in cases where children are involved. •

NOTE: HIV PEP should not be considered if more than 72 hours after the exposure.

See Risk Assessment of Source (Section 2).

In addition to assessing for HIV, the following should also be considered:

- consider screening (unlikely to be positive in first 72 hours) and prophylaxis for other STIs:
- pregnancy testing, as appropriate;
- assess need for emergency contraception.

With all the above in mind, a considered process is followed and a recommendation can be made regarding the use of HIV PEP. In cases where the matter is not clear, consultation with an infectious disease Specialist or Medical Health Officer is recommended.

In all cases, routine follow-up procedures and management for blood borne pathogen exposure are to be followed as outlined in Section 5 – Non-Occupational (Community) Exposures. Specific testing and follow up for STIs as per the Canadian Guidelines on Sexually Transmitted Infections¹⁴ and the Saskatchewan Communicable Disease Control Manual¹⁵ should occur.



 ¹⁴ <u>http://www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php</u>.
 ¹⁵ <u>http://www.ehealthsask.ca/services/manuals/Pages/CDCManual.aspx</u>

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Fischer et al. (2006) provides recommendations and considerations for HIV PEP based on the nature of exposure and what information is known about the HIV status and risks of the source.

 Table 5.1 Recommendations for HIV PEP based on Source Status and Nature of

 Exposure

HIV Status of source	Source individual is known to be HIV	Source has high-risk behaviour and/or is	Source does not have high-risk behaviour
Sexual	positive	from an area of high	nor is from an area of
Exposure	-	HIV prevalence	high HIV prevalence
Receptive anal sex	Recommended	Recommended	Considered
Insertive anal sex	Recommended	Considered	Not recommended
Receptive vaginal sex	Recommended	Considered	Not recommended
Insertive vaginal sex	Recommended	Considered	Not recommended
Fellatio with	Considered	Considered	Not recommended
ejaculation			
Splash of semen into	Considered		
eye			
Fellatio without	Not recommended		
ejaculation			
Cunnilingus	Not recommended		

As in all cases, the patient's preferences should also be factored into the final decisionmaking process.

Sexual Exposures and Sexually Transmitted Infections

Uninfected persons may or may not acquire STIs when exposed to an infected individual. Many factors increase the probability of transmission including:

- the virulence of the pathogen (for example, syphilis is more virulent than gonorrhea, which is more virulent than chlamydia);
- high concentration of the pathogen in semen or other genital fluids;
- presence of another STI in either the infected or susceptible person;
- type of sexual contact (anal intercourse has higher risk than vaginal intercourse with oral sex carrying the lowest risk of transmission);
- absence of male circumcision;
- cervical ectopy;
- no condom with the sexual act;
- use of spermicides;
- trauma associated with the sexual act.





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Sexual transmitted infection prophylaxis should be considered in sexual assault/abuse cases. Offer STI prophylaxis if:

- it is known that the assailant is infected or at high-risk for an STI;
- requested by the patient/parent/guardian;
- the patient has signs or symptoms of an STI;
- in addition, it may be appropriate to offer prophylaxis in situations where vaginal, oral or anal penetration has occurred because most sexual assault victims do not return for follow-up visits.

The efficacy of STI antibiotic prophylaxis has not been studied in sexual assault. Prophylaxis should be as recommended for treatment of specific diseases as outlined in the Canadian Guidelines on Sexually Transmitted Infections.¹⁶

Recommendations for testing and treatments are provided for Sexual Abuse in Peripubertal and Prepubertal Children at: <u>http://www.phac-aspc.gc.ca/std-mts/stiits/cgsti-ldcits/section-6-5-eng.php</u>. A pediatrician should be consulted in all of these instances.

Recommendations for testing and treatment are provided for Sexual Assault in Postpubertal Adolescents and Adults at: <u>http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-6-6-eng.php</u>.

Despite providing prophylaxis, clients should be tested for STIs again in 10 days to 2 weeks.

Hepatitis B Management

- I. Review Hepatitis B Immunization History and Immune Status. During office hours on Monday to Friday, the local public health office may be contacted to review immunization history.
- II. Arrange for Administration of Appropriate Hepatitis B Immunological Agents. Hepatitis B vaccine and/or hepatitis B immune globulin (HBIg) should be provided as per the algorithm in <u>Appendix 8 – Management of Potential Exposures to Hepatitis B.</u>



¹⁶ http://www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php.

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If indicated, HBIg should be provided within 48 hours after an exposure. The efficacy of HBIg decreases significantly after 48 hours but may be given up to 7 days after exposure. This allows time to review the necessity for the immune globulin and to access it from Canadian Blood Services (if it is not already available in the facility/region). In the event of a sexual exposure HBIg may be considered for up to 14 days following exposure.

Individuals requiring immunization may be referred to Public Health (if time allows) or be given the first dose of hepatitis B immunization in the ER and referred to Public Health for completion of immunization series.

