Non-Occupational – Lifestyle Exposures

Non-occupational exposures include those where an individual's lifestyle places them in situations where they may be exposed to human immunodeficiency virus (HIV). Some examples:

- **Single or episodic exposure without taking precautions**
  - tattoo, piercing;
  - fight in a bar;
  - consensual sex;
  - initial experimentation with drugs.
- **Single or episodic exposure with a background of protected chronic exposure**
  - regular, ongoing consensual protected sex with an intimate HIV positive partner and there is condom failure (slips, breaks or fail to use on that occasion);
  - sex workers who would normally use a condom and there is condom failure or sexual assault;
  - an injection drug user who is consistent in using appropriate harm reduction measures who mixes up drug use equipment with another user.
- **Single or episodic exposure with a background of unprotected chronic exposure**
  - individual who has regular, ongoing consensual unprotected sex with an intimate HIV positive partner, is sexually assaulted by their partner or someone else, or has another type of exposure such as a needlestick injury.
- **Chronic exposure without taking precautions or inconsistent use of precautions**
  - injection drug users (IDU) repeatedly sharing needles/works with users with known or unknown HIV status;
  - domestic abuse.

When clients present for an incident for which their lifestyle has placed them at risk, the incident for which they are presenting should be assessed on its own merits. In addition to the risk assessment of the exposure, additional referrals and supports should be offered to the client with ongoing risks. Opportunities to link the client with other supportive services should not be missed.

Although the most effective way to prevent HIV transmission is to protect against exposure, HIV post-exposure prophylaxis (PEP) offers the possibility of preventing HIV transmission when exposure to HIV has occurred. It is likely to be most effective when treatment of high-risk exposures is combined with a strong educational component that emphasizes prevention of future exposures. However there are situations of chronic exposures where use of HIV PEP is not recommended.

Eligibility for HIV PEP should be based on the relevance of HIV PEP to prevent HIV infection from a single exposure and should never be a judgment of behaviour or exposure patterns of the individual. An assessment of an individual's exposure pattern should be based on client self-reporting.

Concerns have been raised about the potential risks of using HIV PEP as an intervention for people whose lifestyle places them in situations where they may be exposed to HIV (US Centers for Disease Control and Prevention, 2005). These include:

- possible decrease in risk-reduction behaviours resulting from a perception that post-exposure treatment is available;
- the occurrence of serious adverse effects from antiretroviral treatment in otherwise healthy persons;
- potential selection for resistant virus (particularly if adherence is poor during the HIV PEP course).

Evidence indicates that these theoretical risks might not be major problems (US Centers for Disease Control and Prevention, 2005):

- Several studies indicate that while individuals may not decrease their at-risk behaviour, they do not increase risky behaviour knowing that HIV PEP is available.
- Most people taking HIV PEP will experience side effects but severe side effects and toxicities appear to be infrequent. Refer to Section 3 - Antiretroviral Therapy (ART) for HIV Post-Exposure Prophylaxis.
- Additional information is included in Appendix 5 – Antiretrovirals in HIV PEP Kits and in Section 6 – Counselling and Follow-Up.

Step 1 – History of the Incident

Take a history of the discreet incident for which the client is presenting. Complete the Exposure Incident Report Form (Appendix 3) and refer to Appendix 15 – Collection Use and Disclosure of Information. Determine if the individual falls into a chronic or episodic exposure category as outlined on page 1.

Determine the time elapsed since the exposure. This may be difficult to determine based on the ongoing risks the individual may be exposed to. Human immunodeficiency virus PEP is most beneficial if started within 2 hours. If the exposure occurred greater than 72 hours from presentation, HIV PEP is not recommended.

If a significant exposure has occurred, then additional considerations for use of HIV PEP for individuals whose lifestyle places them in situations where they may be exposed to HIV include:

- Is this an isolated or infrequent exposure?
- Is this a frequent, recurrent exposure?
- Is there genuine intent to change behaviour?

Human immunodeficiency virus PEP is recommended in situations in which there is an isolated or infrequent exposure (sexual, needle, or trauma) or a lapse in previous risk-reduction practices. Situations that may prompt a request for HIV PEP include condom slippage, breakage, or lapse in use by serodiscordant partners; unsafe needle sharing; or other episodic exposure to blood.

Persons who engage in behaviours that result in frequent, recurrent exposures that would require sequential or near-continuous courses of antiretroviral medications (e.g., discordant sex partners who rarely use condoms or injection-drug users who often share injection equipment) should not have HIV PEP recommended. Follow-up in these situations should still involve offering of HIV testing so early treatment can be commenced if they are identified to be HIV positive.

However, HIV PEP should not be absolutely dismissed solely on the basis of repeated risk behaviour or repeat presentation for HIV PEP. If there is genuine intent to change behaviour, or to leave a domestic violence situation, (and the individual is HIV negative) HIV PEP can be offered for that exposure episode along with supportive education and prevention interventions.

If there is no intent/ability to change exposure, or if high-risk behaviour resumes despite appropriate intervention +/- use of HIV PEP, the risk (potential medication toxicity, adherence factors, potential resistance, and cost) outweighs the benefit of repeated use of HIV PEP. Human immunodeficiency virus PEP is not recommended for persons who continue to engage in high-risk behaviours resulting in frequent, recurrent exposures and who appear to rely on HIV PEP as the sole intervention for HIV prevention.

For individuals who continue to engage in risky behaviour, consultation with an infectious disease Specialist may be warranted to discuss alternative measures that may be available, for example the possible use of pre-exposure prophylaxis. Pre-exposure prophylaxis is not currently funded in Saskatchewan.

Step 2 – Risk Assessment – Refer to Section 2 – Risk Assessment.

a. Exposure Fluid.
b. Type of exposure.
c. Source Assessment – A tool for completing a risk assessment is included in Appendix 14 – Source Patient Risk Assessment. Refer to Appendix 15 – Collection Use and Disclosure of Information and Appendix 16 – Consent for Source Patient Testing Following a Blood/Body Fluid Exposure.

Consider HIV point of care test for the Exposed as outlined in Section 2 – Risk Assessment, HIV Tests for Exposed Individuals.

Step 3 – Classify the level of risk for HIV – Refer to Section 2 – Risk Assessment.

High-risk.
Low-risk.

Step 4 – Management of Exposure

a. Wound/exposure site management.
b. Tetanus vaccination or tetanus immune globulin should be provided based on the assessment of the injury and immunization history.
c. Baseline laboratory evaluation of exposed person. See Appendix 10 – Monitoring Recommendations Following Exposures.
   - HIV testing;
   - serologic testing for hepatitis B and hepatitis C.

   In the instance of sexual exposure, the following should also be considered:
   - consider screening (unlikely to be positive in first 72 hours) and prophylaxis for other sexually transmitted infections;
   - pregnancy testing, as appropriate;
   - assess need for emergency contraception.
d. Testing of source if available. Refer to Table 2.6.

HIV Management – Refer to Section 3 – Antiretroviral Therapy (ART) for HIV Post-Exposure Prophylaxis.

Hepatitis B Management

I. Review Hepatitis B Immunization History and Immune Status.
II. During office hours on Monday to Friday, the local public health[17] office may be contacted to review immunization history.

[17] http://www.saskatchewan.ca/residents/health/understanding-the-health-care-system/saskatchewan-health-regions/health-region-contact-information-and-websites

III. Arrange for Administration of Appropriate Hepatitis Immunological Agents.
Hepatitis B vaccine and/or hepatitis B immune globulin (HBIg) should be provided as per the algorithm in Appendix 8 – Management of Potential Exposures to Hepatitis B.

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.

Hepatitis C Management

There is no PEP for exposure to hepatitis C. Refer to Appendix 9 – Management of Potential Exposures to Hepatitis C.

Sexually Transmitted Infection (STI) Management for Sexual Exposures

Offer STI prophylaxis if:

- it is likely that the patient will not return for follow-up;
- it is known that the source individual is infected or at high-risk for an STI;
- it is requested by the patient/parent/guardian;
- the patient has signs or symptoms of an STI.

Step 5 – Counselling

Refer to Section 6 – Counselling and Follow-Up. In addition, all individuals in chronic risk situations should receive intensified education and prevention interventions, including assessment of their intent to change behaviour or, in the case of domestic violence, their ability to prevent chronic exposure. The attending physician/RN(NP) can deliver this counselling and/or should refer the client to the appropriate agency. See Section 6 – Counselling and Follow-Up.

The fact sheet in Appendix 6a – Patient Information Following an Exposure should be provided and reviewed with the client. When HIV PEP is provided, Appendix 6b – Patient Information for HIV PEP Kits that is found in the PEP Kits should be provided to the individual.

For those who are engaging in behaviours with ongoing risk, refer to Section 6 – Counselling and Follow-Up for additional information and services that the individual may benefit from a referral to.

Regardless of HIV status, assess and assist with access to medical care, social support services, and risk-reduction counselling. Refer to Appendix 13 – Expert Consultation Resources for contact information of various services and care providers.

Step 6 – Follow-up Testing
The client should be advised to follow-up with their family physician for follow-up assessment and testing as outlined in Appendix 10 – Monitoring Recommendations Following Exposures.

> **NOTE:** Public Health will also follow-up with all non-occupational exposures to ensure they are aware of the follow-up required with their primary care provider.

Step 7 – Reporting Requirements

- Refer to Appendix 12 – Reporting Requirements.
- Ensure the Exposure Incident Report Form (Appendix 3) is completed and submitted to the Regional Public Health Office (the Medical Health Officer or Communicable Disease Coordinator) who will submit necessary reporting elements to the Ministry.
- The HIV PEP Kit Replacement Form (Appendix 4) must be completed and Page 1 must be sent to Ministry of Health. Page 2 must be sent to Royal University Hospital Pharmacy to have another kit dispensed to the HIV PEP Kit location.
- Ensure any referrals that are required have been made.