Sexually Transmitted Infections

Introduction and General Considerations

Background Information

The incidence of Sexually Transmitted Infections (STIs) in Saskatchewan has been increasing over the past number of years. This may be due in part to the introduction of testing procedures that are easier to complete and less invasive. In Saskatchewan, the rates for chlamydia have been among the highest in Canada. Refer to http://dsol-smed.phac-aspc.gc.ca/dsol-smed/ndis/c_indp_e.html#c_prov for historical surveillance data collected by Public Health Agency of Canada (PHAC).

STIs are transmitted in the context of other social and health challenges; the risk of recurrent exposure and infection are likely unless these underlying issues are dealt with. A holistic assessment of clients assists in identifying these underlying issues and a multidisciplinary team approach is often necessary and should involve other partners such as physicians, addiction services and mental health as required. The regulations of *The Health Information Protection Act* must be adhered to when involving other partners in the management of individuals or when referring individuals to other agencies.

This section highlights some of the general and special considerations that should be kept in mind when conducting STI investigations. It also highlights key points and summarizes the Canadian Guidelines on Sexually Transmitted Infections which can be located at http://www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php.

Reporting Requirements

Index cases must be reported to the Ministry of Health. See Reporting Requirements in the General Information section of this manual for additional information and guidelines.

Partner Notification

The goal of partner notification is to assist individuals to inform their partners that they have been put at risk and to honor the partner's right to make informed decisions regarding their health.

Partner notification allows for sexual partners, and other contacts exposed to an STI, to be identified, located, assessed, counseled, screened and treated. This process is important in disease surveillance and control as well as for reducing the risk of re-infection for the original case. Refer to Section 1 for a summary of roles of individuals infected with/exposed to communicable diseases for additional information.

Individuals may experience a variety of feelings when they are informed that they have an STI. These feelings may range from guilt, to anger, to embarrassment. A non-judgmental approach can make clients feel more comfortable. Reassuring clients of the confidential nature of STI reporting may facilitate open communication and improve the disclosure of partner/contact information.

- Details on the required timeframes for initiating and completing contact notifications are included within each disease section.

Barriers to Partner Notification

There are a number of barriers that may prevent disclosure of contact names by cases. The following highlight some barriers:

- The index case may fear physical or emotional abuse that may result from partner notification. If there is a threat to client safety, public health officials should be notified of this so that proper safety precautions are taken to protect the index case. Concerns regarding personal safely should be addressed and if notification is expected to result in abuse, the case should be discussed with the Medical Health Officer (MHO) before proceeding.
- The individual may fear losing a partner due to the STI diagnosis (blame/guilt). The health care provider should acknowledge this and discuss the asymptomatic nature of STIs and the benefits of asymptomatic partner(s) knowing that they may be infected.
- Anonymous partners – details regarding the partner's appearance and the location of the encounter should be obtained to try to locate the partner (contact). The Internet is becoming a common venue to meet prospective partners. E-mail addresses and any websites and/or chat rooms used should be collected. Identities may not be revealed when meeting partners in this forum thereby making contact notification a greater challenge. Policies relating to the use of the Internet and e-mail for partner notification must be referred to.

Who Performs Partner Notification?

The client, health care provider, MHO or their designate may notify the partner. When the person with the STI chooses to notify his or her contacts, they must inform the contact of the exposure, explain their duty to get tested and take all reasonable measures to reduce the risk of exposing others.[1]

[1] *The Public Health Act, 1994* and *Disease Control Regulations, 2003*, 25 Apr 2003 c.P-37.1, Reg. 11 s.6.

If the affected person does not wish to notify their contacts on their own, the physician or clinic nurse can complete the partner notification. If the health care provider is unable to do this within 14 days, it should be referred to Public Health to complete. Notification by the health care provider occurs confidentially with the consent of the infected person. Partners will be notified of the possibility of their exposure to an STI (without naming the index case) and their responsibility to get tested and to take all reasonable measures to reduce the risk of exposing others (e.g., condoms, period of abstinence, safer sex practices, etc.).

Methods of Control

A holistic approach in determining the causes of STIs will reveal that there are a number of social circumstances that influence individual behaviours. This is significant when trying to determine broad prevention strategies, but is also important when meeting with individuals (cases, contacts, other) to develop approaches that assist and support them in making personal choices that reduce or eliminate risks. The following link is an excellent resource to assist health care providers with the prevention, diagnosis and management of STIs: http://www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php.

Primary Prevention

Public health professionals are engaged in a variety of activities with individuals and groups where health promotion and primary prevention measures can be introduced. A holistic, client-centered approach should be used to determine the most appropriate approaches and interventions that would be beneficial to the individual client or group being worked with. The topics outlined below for the assessment of individual sexual health and risk behaviours can also be adapted for use in other health education settings.

The following are topics that should be assessed when discussing sexual health and risk behaviours with individual clients and when providing health education in other community settings:

- relationships;
- sexual risk behaviours (number of partners, etc.);
- STI history;
- reproductive health history;
- substance use;
- psychosocial history.

The Attachment - Risk Assessment Questionnaire is a sample questionnaire that can assist in determining what tests/referrals/counseling would be appropriate.

The information collected from this assessment will assist in identifying measures to reduce risk of exposure to STIs. It may also identify circumstances that could have an impact on the general health of the individual, for example, addressing substance use and other psychosocial issues may have a greater impact on the health of the client.

In addition to the counseling provided during the risk assessment, the following topics should also be addressed with any client that is receiving follow-up to or for an STI. These also apply to the follow-up of their partner(s):

- serial monogamy;
- acceptance of sexuality;
- planning prevention;
- safer sex;
- proper use of condoms;
- contraceptive advice.

Clients should be given information that is easy-to-apply:

- Discuss limiting alcohol or drug intake prior to sexual activity, as they both decrease inhibitions and could affect decision-making and negotiation skills.
- Reinforce that it is *not* possible to assess the chances that a partner has an STI on the basis of knowing the partner's sexual history; being in a close relationship with a partner; or being monogamous with a partner who has had previous sexual partners and who has not been tested.
- It is important to tell clients that routine testing is not done for all STIs (e.g., human papilloma virus [HPV], herpes simplex virus [HSV]), so even if they or their partner's tests are all negative they may still have an asymptomatic STI.

Secondary Prevention

Active screening of risks for STIs assists in the identification of individuals who may be infected with an STI. Testing should be offered to clients based on the results of the risk assessment.

Refer to Attachment - Risk Assessment Questionnaire for a tool that is available to assist in client assessment. This tool provides a framework for assessments and investigations and should be adapted to suit the situation and individual while keeping in mind the benefits of a broad assessment and how this information can be used. Testing should be offered to clients based on the results of the risk assessment.

General Recommendations for Testing based on Results of the Risk Assessment

Since the risk of human immunodeficiency virus (HIV) increases when a client is infected with another STI (chlamydia, gonorrhea, syphilis, HSV), HIV pre-test counselling should occur and HIV testing should be offered. Refer to Blood and Body Fluid Pathogens (Section 6) for information on HIV and testing procedures.

Clients with ongoing risks for infection with STIs should routinely be tested for:

- chlamydia;
- gonorrhea;
- HIV;
- syphilis.

If other risk factors are present, screening should be recommended for hepatitis B and hepatitis C:

- Individuals with multiple sexual partners are eligible for publicly funded hepatitis B vaccine if they are non-immune and are not HBsAg positive.
- Hepatitis C positive clients are eligible for publicly funded hepatitis A and/or hepatitis B vaccines if they are non-immune to hepatitis A or hepatitis B.
- Individuals born after January 1, 1984 are eligible for publicly funded hepatitis B vaccine.

For further information, please refer to the Public Health Agency of Canada STD Self-Directed Learning module based on 1998 Canadian STD Guidelines at http://www.phac-aspc.gc.ca/slm-maa/index.html.

Referrals

Clients may benefit from referrals to supportive services depending on the circumstances of exposure. Suggested referrals include child and youth services (Teen Wellness Centres), mental health services, pregnancy counseling clinics or addiction services to name a few. Familiarity with the available regional services and community resources will assist in making appropriate referrals. Procedures of the Health Authority should be followed when making referrals. One aspect of this includes ensuring the confidentiality of the client's health information is maintained in accordance with *The Health Information Protection Act* and *The Public Health Act*.

Special Considerations

Children/Sexual Abuse

Every province and territory has statutes in place that require the reporting of child abuse. In Saskatchewan, the duty to report situations where they believe a child is being abused falls under *The Child and Family Services Act.*[2] This duty applies in spite of any claim of confidentiality. The offences covered in this Act are outlined in Section 81. This Act also defines a child in the need of protection.[3] *The Emergency Protection for Victims of Child Sexual Abuse and Exploitation Act*,[4] also defines abuse and the duties to report instances or suspicions of child sexual abuse. If reasonable cause to suspect child abuse exists, the health care provider must contact local child protection services and/or law enforcement agencies promptly. The offences of this Legislation are outlined in Section 24 of this Act. Other resources that outline child protection issues include the *Criminal Code* and the *Provincial Child Abuse Protocol 2006*.

Initial Laboratory Work-up

Note: It is important to notify the lab if the laboratory specimens being submitted are for a child abuse/sexual assault case, as the urine specimen must undergo a second PCR test if the first result is positive.

- Cultures for *N. gonorrhoeae* and *C. trachomatis* from specimens collected from any sites of penetration or attempted penetration. See Attachment - Transport Media for Specific STIs.

[2] *The Child and Family Services Act*, 1989-90 cC-7.2 s12; 1996 c11 s2.
[3] *The Child and Family Services Act*, 1989-90 cC-7.2 s11; 1999 c.14 s3.
[4] *The Emergency Protection for Victims of Child Sexual Abuse and Exploitation Act*, 2002 c.E-8.2, s.4.

- Urine nucleic acid amplification tests (NAATs) (as a substitute for culture).
- Collection of a serum sample for immediate evaluation for HIV, hepatitis B, hepatitis C, and syphilis. See Guidelines for the Management of Potential Exposures to Hepatitis B, Hepatitis C, HIV and Recommendations for Post-exposure Prophylaxis at http://www.ehealthsask.ca/services/manuals/Pages/hiv-guidelines.aspx.

Management and Treatment

Considerations for prophylaxis:

- Offer presumptive prophylaxis for STIs and hepatitis B:
  - in situations where vaginal, oral or anal penetration has occurred, because many sexual assault victims do not return for follow-up visits;
  - when it is known that the assailant is infected with a specific STI;
  - when it is requested by the patient/parent/guardian;
  - when the patient has signs or symptoms of an STI.
- Post-exposure administration of HBIg and/or hepatitis B vaccine may prevent hepatitis B virus infection.
  - 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 sections on specific infections for more information).

Pregnancy

If pregnancy is a possible result of the assault, the emergency contraceptive pill (ECP) should be considered. Treatment should be offered and taken as soon as possible, up to 72 hours after exposure (efficacy declines after this, but some benefit may be achieved up to 120 hours after exposure).

- ECP is available through a physician or directly through some pharmacies and STI clinics.
- Preferred: levonorgestrel 1.5 mg PO as a single dose (Plan B).
- Alternative: levonorgestrel 0.75 mg PO bid x 2 doses if a single dose (as noted above) is not likely to be tolerated.

For further information on emergency contraception visit the Society of Obstetricians and Gynecologists of Canada, Clinical Practice Guidelines at http://www.sogc.org/guidelines/index_e.asp#Contraception.

Other Management Issues

- If the client consents, appropriate referral(s) should be made as necessary (e.g., to sexual assault teams, local police/Royal Canadian Mounted Police, psychological support, local victim support organizations etc.).
- Advise the client 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).

Follow-up

- Follow-up testing of STIs (i.e., syphilis) should be recommended as necessary.
- In circumstances in which transmission of syphilis, HIV, or hepatitis B is a concern but the disease status of the source is unknown and baseline tests are negative, repeat testing should be done at 6, 12 and 24 weeks (depending on the infection being tested for) after the last suspected sexual exposure. See also the introduction to Blood and Bodily Fluid Borne Pathogens.
- Review mental state and arrange appropriate referral to mental health services if necessary.

Refer to the following link for detailed information on Children and Sexual Abuse: http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/606sexassault-eng.pdf.

Travel

There has been an association between travel, sexual behavior and the risk of acquiring sexually transmitted infections (STIs). The risk of acquiring STIs is increased in travellers because travel affords freedom from the normal social constraints of daily life at home as well as increased time and opportunity for casual sex. Studies have shown that 5 to 50 percent of travellers engage in casual sex and that a third to over one half of travellers do not consistently use condoms. Associated risk factors include being male, younger age, travelling alone or with friends, being single, men who have sex with men (MSM), long duration of stay, travelling on business, and being a smoker or using alcohol or illicit drugs.

STI rates are particularly high in developing countries. The incidence of antibiotic resistance to STIs is increasing (e.g., gonococcal strains may be resistant to penicillins, tetracyclines, spectinomycin, and fluoroquinolones). Additional information can also be obtained by consulting the Saskatchewan International Travel Manual or by visiting: http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/609travel-voyag-eng.pdf.

Sex Trade Workers

Sex workers are female, male or transgendered adults or young people who receive money, shelter, drugs or goods in exchange for sexual services, either regularly or occasionally, and who may or may not consciously define those activities as income-generating. Since there are no reliable verbal or visual clues as to whether a client is involved in the sex trade or not, when appropriate, patients should be asked whether they ever receive money, shelter or goods in exchange for sexual services.

The following include some factors that make sex workers vulnerable to STIs, including HIV:

- lack of control (e.g., condom use, refusing clients);
- lifestyle risks, such as violence, substance use and mobility;
- stigmatization and marginalization;
- limited economic options;
- limited access to health, social and legal services;
- limited access to information about and the means of prevention;
- gender-related differences and inequalities;
- sexual abuse and exploitation, including trafficking and child prostitution;
- legislation and policies affecting the rights of sex workers;
- mental health problems;
- incarceration;
- lack of family and social support.

Clinicians and health care providers need to understand the specific circumstances for each client and develop an individualized risk-reduction plan for each client. Successful STI/HIV prevention focuses on the promotion of safer sexual behaviour including the availability of female and male condoms and their correct usage; improved negotiating

skills; and supportive policies and laws. Peer education, outreach work, accessible services, advocacy, community development, program coordination and sex worker involvement in risk reduction programming are all important prevention principles and strategies.

Hepatitis B vaccination should be made available free of charge to sex workers since they are at increased risk for infection. See the Saskatchewan Immunization Manual[5] for details of publicly funded immunizations. For more information on sex trade workers, go to http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/607sexworkers-eng.pdf.

Inmates and Offenders

Inmates in correctional facilities in Canada, and around the world, bear a disproportionate burden of illness related to infectious disease compared to the general population. As a result, rates of sexually transmitted infections (STIs), hepatitis B (HBV), hepatitis C (HCV) and HIV/AIDS are significantly higher among prison inmates.

See the introduction to Blood and Body Fluid Pathogens for more information on inmates and harm reduction.

Reporting and Partner Notification

Reporting must occur from the correctional facility to the local Public Health office. Partner notification is a major component of STI follow-up but inmates may be reluctant to disclose information about contacts or behaviours that may be deemed inappropriate, illegal or be stigmatized. This highlights the importance of confidentiality and a non-coercive approach to partner-notification process. Inmates view Public Health as an outside agency and therefore may be more willing to disclose information about contacts to Public Health.

Follow-up

Inmates who continue to engage in higher risk behaviour should be encouraged to be screened regularly for STIs. Safer sex and harm reduction practices should be reinforced with these clients.

[5] http://www.ehealthsask.ca/services/manuals/Pages/SIM.aspx.

It is important for collaboration to occur between correctional services and local public health to ensure follow-up occurs with those who have been/will be released into the community. For more information, go to http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/602offend-eng.pdf.

Immigrants and Refugees

Immigrants and refugees[6] may come from countries with higher rates of STIs than Canada. STIs that are relatively uncommon in Saskatchewan may be common in these countries and there may also be higher rates of drug resistance with some of these STIs. There are a number of variables that health care workers must be sensitive to when working with these clients. These may include:

- language barriers;
- cultural norms;
- social norms;
- gender roles;
- religion;
- personal experiences from their country of origin may have been traumatic.

A culturally sensitive approach must be used when working with clients. Anonymity and confidentiality must be maintained when utilizing translation or other supportive services and should include the consent of the individual.

See the introduction to Blood and Body Fluid Pathogens for more information on immigrants and refugees or go to http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/601immigrants-eng.pdf.

[6] A *legal* immigrant is a person born outside of Canada who has been granted the right to live in Canada permanently by immigration authorities, whereas an *illegal* immigrant has not been granted such a right. A refugee is a person outside his/her country of nationality who is unable or unwilling to return because of persecution on account of race, religion, nationality, membership in a particular social group, and/or political opinion.

Substance Use/Abuse

The use of alcohol and illicit drugs is associated with risky sexual behaviour including: poor and inconsistent condom use; sex with multiple partners; early sexual debut; trading sex; buying sex; sex with known injection drug users; lower condom-use self-efficacy or perceived ability to use condoms; and lower HIV-related knowledge (Public Health Agency of Canada, 2008).

- Substance use has also been linked to elevated hepatitis C and STI transmission.
- Users of more stigmatized substances, such as injection drugs and crack, are at higher risk for STIs than users of less stigmatized drugs, such as marijuana.
- Youth who abuse substances are more likely to engage in risky sexual behaviour and continue these risky behaviours and drug use into adulthood.
- The use of recreational drugs among men who have sex with men (MSM) has risen in recent years and has been linked to increases in risky sexual behaviour and rising STI rates. Sildenafil citrate (Viagra), vardenafil (Levitra) or tadalafil (Cialis) can be used to counteract the erectile-dysfunction side effect of some of these illicit drugs, a practice that has been linked to multiple sex partners and STI acquisition.

When substance use/abuse is identified as a risk, it is important to provide counselling and make referrals to community resources as appropriate. For more information go to http://www.phac-aspc.gc.ca/std-mts/sti-its/pdf/608substance-eng.pdf.

References

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