

7 SEXUALLY TRANSMITTED AND BLOOD BORNE

A sexually transmitted infection (STI) is an infection that can be transmitted from one person to another through sexual contact (the vehicle may be exchange of semen, vaginal fluid, blood or other body fluids). A blood borne infection is transmitted through contact with infected blood.

The [Canadian Guidelines on Sexually Transmitted Infections](#) are a resource for information on the prevention, diagnosis, treatment and management of Sexually Transmitted Infections (STI) across diverse patient populations.

7.1 Transmission

Sexually transmitted infections (STI) are spread primarily through person-to-person sexual contact. In this context, sexual contact is more than just sexual intercourse (vaginal and anal) and also includes kissing, oral-genital contact, and the use of sexual 'toys' such as vibrators.

STIs may be transmitted through the following modes:

- Direct contact with affected body areas and/or body fluids from an infectious person, usually by sexual contact (oral, vaginal, anal and oral/anal rimming).
- Vertical transmission at time of delivery or placental transmission during pregnancy, and during breastfeeding.

Blood-borne infections (BBI) are transmitted by contact with contaminated blood. Some infections (for example HIV, hepatitis B and hepatitis C) may be transmitted through both sexual and blood borne transmission routes.

BBIs may be transmitted by direct contact with objects that have been in contact with contaminated blood. Examples are health care acquired infections (e.g. needlestick injury) or high risk behavior such as sharing contaminated needles for drug use, tattoos and body piercings.

7.2 Risk factors

The following individuals may have an increased risk of acquiring a sexually transmitted infection:

- Individuals who have sexual contact with person(s) with a known STI.
- Individuals under 25 years of age, who are sexually active (related to Chlamydia).
- Individuals with a new sexual partner or more than two sexual partners in the past year.
- Serially monogamous individuals who have one partner at present but who have had a series of one-partner relationships over time.
- Individuals who do not use condoms (male, female) or dental dams.
- Individuals who engage in substance use, such as alcohol or chemicals (i.e., pot, cocaine, ecstasy, crystal meth), especially if associated with having sex.
- Individuals engaging in unsafe sexual practices (i.e., unprotected oral, genital or anal sex., rough sex with blood exchange. and sharing sex toys).
- Sex workers and their clients.
- Individuals practicing 'survival sex': exchanging sex for money, drugs, shelter or food.
- Individuals who are street involved and/ or homeless.
- Individuals who engage in anonymous sexual partnering (i.e., Internet, bathhouse, rave party).
- Individuals who are victims of sexual assault/abuse.

- Individuals who were previously diagnosed with a STI.
- Individuals born to a mother who has a sexually-transmitted infection.

The following individuals may have an increased risk of acquiring a blood-borne infection:

- Individuals who engage in anonymous drug use partnering;
- Individuals having unprotected rough sex with blood exchange;
- Individuals sharing contaminated syringes/needles for drug injection and other drug use;
- Individuals who are street involved and/ or homeless;
- Individuals born to a mother who has a blood-borne infection;
- Individuals unsafely handling (potentially) contaminated material (needles, products soiled with blood or blood products);
- Individuals with a concomitant STBBI;
- Individuals with exposure to bites/ aggressive behavior (e.g. first responders, health care workers etc.).

7.3 Diagnosis and Laboratory Guidelines

Regional Laboratories

- Process clinical samples and perform isolation and basic identification techniques.
- Send samples to the Reference Laboratory, if necessary.
- Refer samples to external laboratories for testing not available locally.
- Report their data to regional public health.

Laboratory Guidelines

- Collect samples per current regional laboratories procedures.
- Submit samples to regional laboratories.

Please refer to disease specific guidelines for information on laboratory guidelines or contact your local laboratory.

7.4 Prevention

Education

Educate cases and contacts about the specific disease, symptoms, diagnosis, period of communicability, and applicable preventative measures. If required inform persons of any prophylaxis and/or exclusion measures (refer to specific disease guidelines).

In addition educate cases and contacts on:

- safer sex practices that can remove or reduce the risk of transmitting the STI to a partner or reduce the risk of reinfection in the patient;
- treatment information;
- screening and testing;
- partner notification;
- managing co-morbidities and associated risks;
- safer injection practices and harm reduction strategies.

More information on these prevention messages can be found in other sections.

Many STIs are transmitted in the context of other medically and socially challenging circumstances. Prevention and management of conditions such as drug addiction should be integrated into an overall health care plan.

Immunization

Some sexually transmitted and blood borne infections (STBBIs) are vaccine preventable. Routine immunization programs are available for Human Papillomavirus (HPV) and Hepatitis B (HB). Targeted immunization interventions are available for high risk individuals and during communicable disease follow-up for Hepatitis B (HB) and Hepatitis A (HA).

For immunization as a public health measure see Case Management sections and specific disease guidelines.

7.5 Case Management

Investigation

Investigations of STBBIs should start as soon as reasonably possible after notification. Investigation of STBBIs usually begins with communication with the attending physician (e.g. by email, telephone or letter).

Provide advice and education to cases about symptoms, communicability period, and applicable preventative measures. Advise cases to consult with a health care provider as needed.

Identification and management of contacts is fundamental in the control of STBBI. Interview cases to obtain names of all relevant contacts (sexual, perinatal, or drug) and identify contacts upstream ('trace back') from whom infection was potentially acquired; and identify contacts downstream ('trace-forward') whom the case may have infected.

All confirmed cases should be encouraged to get additional STBBI testing for chlamydia, gonorrhea, hepatitis B and C, syphilis and HIV.

Please refer to the latest version of the [Canadian Guidelines on Sexually Transmitted Infections](#).

Exclusion/ Social Distancing

Persons with confirmed STIs and their partner(s) should abstain from sexual intercourse until treatment of the case and partner(s) is complete. The length of abstinence from sexual intercourse should be discussed with the treating clinician. In any situation but a long term single partner relationships, unprotected sex should be discouraged.

Treatment

Cases should be treated according to the latest version of the [Canadian Guidelines on Sexually Transmitted Infections](#). Consideration should be given to initiate presumptive treatment for clients with a clinically suspected diagnosis if follow-up or testing cannot be assured.

Immunization

For the purpose of preventing and controlling the spread of STBBIs, publicly funded vaccine may be provided through routine and targeted interventions for high risk individuals and for communicable disease follow-up.

In general immunization for vaccine preventable STBBIs (e.g. hepatitis B, human papillomavirus) are recommended for non-immune individuals diagnosed with another STBBI.

7.6 Contact Management

Investigation

Ensure partner notification and management of contacts according to the specific disease guideline and latest version of [Canadian Guidelines on Sexually Transmitted Infections](#) or as directed by the regional Medical officer of Health.

Contacts are those who:

- Have had sexual contact with the case during the communicable period and/or
- Were exposed to infectious blood or other bodily fluids of the case.

To prevent reinfection partners need to be assessed or clinically evaluated, tested, treated and counselled as required.

Notify all identified partners of their possible exposure as soon as possible, typically within 2-3 working days of identification, unless there is a risk for partner violence. If there is potential for violence, the provider should seek expert advice prior to notification.

Partner notification may be done by the client, health care provider or public health authorities. Often, more than one strategy may be used to notify different partners:

- provider referral: the healthcare provider/ public health notifies partner(s),
- contract referral: the index case notifies partner(s) and encourages them to seek medical care. Partners who do not seek medical care within a set limit of time are contacted by the healthcare provider/ public health.
- patient referral: the index case notifies partner(s).

Contact tracing may be given priority for infections that are life-threatening or have major sequelae. These would include:

- HIV (e.g. partners of cases acutely infected, partners of cases with a high viral load or partners of cases co-infected with another STI);
- infectious syphilis;
- infections where contacts are pregnant;
- Infections where contacts are young women at increased risk for pelvic inflammatory disease or other STI complications (e.g. infertility);
- Situations with imminent risk of a contact transmitting an infection to others (contacts who are likely to have unprotected sex with partners; contacts who are likely to share used drug equipment with others or a contact who is pregnant with a risk of transmitting the disease vertically the foetus or newborn).

Consider the following elements in contact management:

- Infection risk factors;
- Definition of a contact (sexual, drug use and neonates born to infected mothers);
- Trace-back period;
- Testing (disease specific and for other STBBI) and laboratory diagnosis;
- Treatment including empiric or prophylaxis;
- Prevention including immunization, safer sex and safer injecting behaviors.

Provide advice and education to symptomatic contacts about symptoms, communicability period, and applicable preventative measures. Advise symptomatic contacts to consult with a health care provider as needed.

Exclusion/Social distancing

Partner(s) should abstain from sexual intercourse until treatment of the case and partner(s) is complete. The length of abstinence from sexual intercourse should be discussed with the treating clinician. In any situation but long term single partner relationships, unprotected sex should be discouraged.

Prophylaxis

Contacts should be screened and treated according to the latest version of the [Canadian Guidelines on Sexually Transmitted Infections](#).

Immunization

For the purpose of preventing and controlling the spread of these infections, publicly funded vaccine may be provided to contacts of some cases as a follow-up procedure. Refer to disease specific guidelines.

7.7 Outbreak management

Investigation

An outbreak can be declared when there is an increase in illness that is unusual in terms of time and or geography. An outbreak is confirmed through laboratory and or epidemiological evidence. Regional MOHs declare the start and end of regional outbreaks.

Activate the local outbreak plan when an outbreak is declared.

Exclusion/ Social Distancing

Please refer to the disease specific guidelines for guidance on social distancing/ exclusion.

Treatment/ Prophylaxis

Cases and Contacts should be screened and treated according to the latest version of the [Canadian Guidelines on Sexually Transmitted Infections](#).

Immunization

Immunization may be offered for some STIs. Refer to Disease Specific Guidelines.

7.8 Other Considerations

Child Abuse

Suspicious that a child has been abused, neglected or ill-treated (including sexual exploitation through child pornography) will be guided by the [Family Services Act](#) and by the intervention guidelines of the New Brunswick [Child Victims of Abuse and Neglect Protocols](#). Sexual abuse needs to be suspected when a sexually transmitted infection (genital, rectal, pharyngeal) is diagnosed in any child under the age of majority.

Health Care workers/ medical procedures

Some medical procedures are linked with an increased risk of acquiring or spreading a STI or blood borne infection. Exposure due to specific medical procedures should be investigated and followed-up. Safe work practices ('Universal Precautions') are required for all tasks involving possible exposure to blood or certain body fluids. They include:

- safe collection of fluids and tissues for disposal in accordance with regulations;
- safe removal and disposal or decontamination of protective clothing and equipment;

- procedures to follow in the event of spills or personal exposure such as needlestick injuries;
- procedures to observe when using and disposing of needles and other sharp objects;
- personal protective equipment is recommended such as gloves, masks, face shield, eye protection and apron.

7.9 Reportable Diseases and Events

- Chlamydial infection (genital)
- Cytomegalovirus (congenital and neonatal)
- Gonococcal infection
- Hepatitis B
- Hepatitis C & G
- Hepatitis – other viral
- Herpes (congenital and neonatal)
- Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
- Streptococcus group B Beta-hemolytic (neonatal)
- Syphilis

Sexually Transmitted and Blood Borne Education

Disease specific information				
<input type="checkbox"/> Pathogen	<input type="checkbox"/> Mode of transmission	<input type="checkbox"/> Period of communicability	<input type="checkbox"/> Risk factors for transmission	<input type="checkbox"/> Risk factors for susceptibility
Education and control measures				
STI Prevention	<input type="checkbox"/> Practice Safer Sex		<input type="checkbox"/> Have regular medical check-ups	
	<input type="checkbox"/> Limit number sexual partners		<input type="checkbox"/> Know your sexual partner's history	
	<input type="checkbox"/> Effect of alcohol and drugs on decision making ability needed to practice safer sex		<input type="checkbox"/> Inform your partner if you have a sexually transmitted or blood borne infection	
BBI Prevention	<input type="checkbox"/> Limit number drug use partners		<input type="checkbox"/> Never share drug use equipment	
	<input type="checkbox"/> Use clean needles/syringes and drug use equipments		<input type="checkbox"/> Tattoo, body piercing and acupuncture with sterile equipment	
	<input type="checkbox"/> Inform your partner if you have a sexually transmitted or blood borne infection			
Condom use	<input type="checkbox"/> Store condoms in a dry place away from heat and light		<input type="checkbox"/> Do not use the female condom with the male condom	
	<input type="checkbox"/> Use water-soluble lubricant with male condoms		<input type="checkbox"/> Use oil based lubricants with female condoms	
	<input type="checkbox"/> Use latex male condoms		<input type="checkbox"/> Use a pre-lubricated condom with a silicone-based lubricant	
	<input type="checkbox"/> Use condoms correctly		<input type="checkbox"/> Use a new condom every time you have sex	
	<input type="checkbox"/> Check expiration date and package integrity			
Additional	<input type="checkbox"/> Disease factsheet <input type="checkbox"/> STBBI Prevention web page <input type="checkbox"/> Information provided verbally <input type="checkbox"/> Information provided electronically			

Date

Regional Public Health