HIV TESTING GUIDELINES
FOR THE PROVINCE OF BRITISH COLUMBIA
2014

BRITISH COLUMBIA

Office of the
Provincial Health Officer

CONTENTS

BACKGROUND

In 2014, HIV infection is a chronic manageable medical condition. Early diagnosis and treatment with antiretroviral therapy (ART) allows HIV infected patients to live long and productive lives, and reduces transmission of the virus.

In British Columbia, there are an estimated 12,000 people living with HIV. Each year 200-300 people ranging in age from 13 to 81 years old are diagnosed with HIV infection.[1]

Despite advances in treatment, there continues to be significant and avoidable morbidity and mortality occurring amongst HIV infected individuals, much of which is attributable to late diagnosis. In the last decade in Vancouver, over 60% of diagnoses occurred after patients should already be on treatment.[2] In BC up to 17% of patients have advanced disease at the time of diagnosis.[3] Data from the United Kingdom [4], United States [5], and Vancouver [6] indicate that people diagnosed late in their infection have had multiple missed opportunities for earlier diagnosis in acute, community, and primary care settings.

This delay in diagnosis has consequences for individuals as well as for the community. For individuals diagnosed late, there is an impaired response to ART, as well as overall increased morbidity and mortality. For the community, late diagnosis contributes to the spread of HIV. It is estimated that 54% of new HIV infections occur via transmission from individuals who are unaware of their HIV status[7]. However, people who are diagnosed and are on effective treatment are significantly less likely to transmit infection to their partners.

To decrease late diagnoses, many jurisdictions, such as the United States[8,9], the United Kingdom[10], and France[11], now recommend routine HIV testing in acute and primary care – in addition to existing approaches to HIV diagnosis. This approach recognizes that HIV testing based on the recognition of an individual's risk factors is insufficient to meet the goal of early diagnosis for all patients. It has been demonstrated to be highly acceptable to patients and health care providers, and effective in reaching and diagnosing patients who were not benefiting from early diagnosis and treatment.[12]

Health care providers may not perceive a risk or understand an individual to be at risk for HIV, and individuals may not disclose their reasons for testing or their risks for HIV. Requiring patients to disclose a risk to receive an HIV test can be an unintended barrier to testing and a missed opportunity for diagnosis. As such, an HIV test should be ordered whenever an individual requests it.

Experience with antenatal screening has shown that routine testing of a large group of individuals based on demographic factors (and not on risk factors), is considered generally acceptable and is a critical element in effective prevention of transmission of HIV.

These guidelines articulate HIV testing recommendations for British Columbia in 2014 . Each component of these guidelines will be evaluated with ongoing monitoring and assessment. As with all guidelines, HIV testing recommendations will evolve over time.

We recommend that health care providers know the HIV status of all patients under their care.

Specifically, we recommend that providers offer an HIV test,

- **Routinely,** every five years, to all patients aged 18-70 years
- **Routinely,** every year, to all patients aged 18-70 years who belong to populations with a higher burden of HIV infection
- **Once** at age 70 or older if the patient's HIV status is not known

AND offer an HIV test to patients including adults 18-70, youth and the elderly, whenever

- They present with a new or worsening medical condition that warrants laboratory investigation
- They present with symptoms of HIV infection or advanced HIV disease
- They or their providers identify a risk for HIV acquisition
- They request an HIV test
- They are pregnant

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ROUTINE TESTING FOR HIV - INDIVIDUALS PRESENTING FOR CARE

RECOMMENDATION

Offer an HIV test to all individuals 18-70 years of age in your practice. For patients over 70 whose HIV status is not known, test once and then test if indicated by one of the considerations below.

FREQUENCY

After an initial HIV test in all patients, repeat HIV test at a frequency of every five years, or earlier if another indication for HIV testing is identified. The optimum frequency of testing in British Columbia's population is not yet determined, and the recommended frequency may change over time.

Some populations in BC are at increased vulnerability and experience a higher burden of HIV infection and morbidity.

Offer patients who are members of these populations HIV testing annually, or earlier another indication for HIV testing is identified. These populations include:

- *Gay men*
- *People who inject drugs*
- *People who work in the sex trade*
- *People from endemic countries**
- *Aboriginal people***

IN PRACTICE

Offer an HIV test when doing blood work for another reason

Offer as part of new patient intake

Offer when you do not have an HIV result for your patient in the past five years

*** IN 2014 COUNTRIES WHERE HIV IS ENDEMIC INCLUDE COUNTRIES OF THE CARIBBEAN AND SUB-SAHARAN AFRICA.**

**** BC'S ABORIGINAL POPULATION, LIKE OTHER POPULATIONS WITH A HIGHER BURDEN OF DISEASE, IS DIVERSE AND HAS A RANGE OF HIV PREVALENCE. AS WITH OTHER POPULATIONS HAVING A HIGHER BURDEN, RECOMMENDATIONS ON TESTING FREQUENCY MAY BE SUBJECT TO CHANGE.**

CHANGE IN HEALTH STATUS

RECOMMENDATION

Offer an HIV test to all patients, including those over 70 and youth, whenever ordering diagnostic blood-work for a new or worsening medical condition.

FREQUENCY

As clinically indicated

IN PRACTICE

As HIV can have an array of nonspecific presentations, include HIV infection in the differential diagnosis for all patients, whether or not an individual risk for HIV acquisition has been identified. This includes when

a) a patient presents with symptoms that warrant laboratory investigation. Such conditions include **but are not limited to**; fever of unknown origin, mononucleosis-like syndrome, pneumonia, unexplained weight loss, unexplained hematological abnormality, and fatigue or failure to thrive.

b) a patient presents with symptoms associated with HIV infection or immune compromise. These symptoms include, but are not limited to lymphadenopathy, herpes zoster, recurrent and/or chronic herpes simplex infection, anogenital warts, anal cancer, cervical cancer, molluscum contagiosum, unexplained or recalcitrant prolonged diarrhea, unexplained peripheral neuropathy, Bell's palsy, oral candidiasis, oral hairy leukoplakia, seborrheic dermatitis, fungal infections, recurrent bacterial infections (e.g. cellulitis, folliculitis, pneumonia, bronchitis), unexplained dementia, aseptic meningitis, B-cell lymphoma, Kaposi's sarcoma or opportunistic infection indicative of immunodeficency.

INDIVIDUAL RISK TRIGGERED TESTING

RECOMMENDATION

Offer an HIV test to all patients, including youth and people over 70 years of age, when a risk for HIV infection is identified

Offer an HIV test every time you test for or diagnose:

- *A sexually transmitted infection*
- *Hepatitis C*
- *Hepatitis B*
- *Tuberculosis*

FREQUENCY

As clinically indicated by an identified risk

If an ongoing risk is present, test every 3-6 months

After an incarceration

If a recent high-risk exposure has occurred, or acute HIV infection is suspected, repeat at 4 and 12 weeks

IN PRACTICE

If a recent high-risk exposure has occurred, or acute HIV infection (seroconversion) is suspected, indicate "query acute HIV" on the test requisition

PATIENT INITIATED TESTING

RECOMMENDATION

Order an HIV test whenever a patient requests it

FREQUENCY

Whenever a patient asks

IN PRACTICE

Individuals may not disclose their reasons (or their risks) for testing for HIV. Eliciting these reasons or risks may be a barrier to testing

ANTENATAL SCREENING FOR HIV

RECOMMENDATION

Offer an HIV test as part of routine antenatal care for all patients

FREQUENCY

Once for every pregnancy

If at ongoing risk, repeat in the third trimester

SPECIAL CONSIDERATIONS FOR TESTING

When to test after a possible exposure to HIV[14]

It is important to understand HIV testing window periods when considering an HIV test after a possible exposure. Traditionally, waiting 3 months after exposure was recommended; however, newer 4th generation HIV tests have shortened the window period. The average window period for 4th generation enzyme immunoassays (EIA) tests (which detect p24 antigen and HIV antibodies) is 16-18 days.

Diagnostic methods and technologies continue to evolve and the window period may be shortened in the future.

Most patients can be tested at 4 weeks following exposure (>95% of infected individuals will have detectable antibodies at this time). If negative, repeat testing at 3 months is recommended (>99% of infected individuals will have a positive EIA at this time).

If a recent high-risk exposure has occurred, or acute HIV infection (seroconversion) is suspected, test now. Please indicate "query acute HIV" on the laboratory requisition. Molecular detection methods can be added to standard serology.

Results of these tests require interpretation within the clinical and epidemiological context of the patient. A negative result in an individual with a high likelihood of being HIV positive can be reviewed with the medical microbiologist responsible for the testing laboratory.

Non-Nominal Reporting

Non-nominal reporting is available in British Columbia, meaning that the full name of the individual is not reported to public health. (The first name, initials, and date of birth are reported to the Medical Health Officer for surveillance purposes.) The full name of the individual is still on the specimen sent to the laboratory.

Other Testing Options

Occasionally, providers may encounter a patient who has concerns about confidentiality in HIV testing.

Testing using an alias or initials only is available at certain sites in British Columbia. See: http://smartsexresource.com/get-tested/hiv-testing

A pilot of anonymous testing is underway in British Columbia. With an anonymous HIV test, the test is identified by a code known only to the patient. No identifiable or contact information is collected and the person being tested must provide his or her anonymous testing code in order to receive the result.

Patients seeking an anonymous HIV test can access this test by: http://smartsexresource.com/topics/hiv-anonymous-testing.

Point of Care Testing

In British Columbia, point of care testing is used in the outreach setting. It has a similar sensitivity to traditional 3rd generation HIV testing. Confirmatory testing is required for indeterminate, invalid, and preliminary positive results. Point of care testing is insufficient to rule out acute HIV infection and is not recommended for those with a recent exposure.

For more information on POC testing, please see:

http://www.bccdc.ca/SexualHealth/Programs/ProvincialPointofCareHIVTestingProgram/default.htme

CONSENT AND HIV TESTING

The purpose of a pre-test discussion is to establish informed consent. For HIV testing, obtaining informed consent is the same as for any other diagnostic test or treatment. As with other diagnostic tests, if the pretest probability of a positive result is high, more extensive discussion may be warranted. If a patient declines an HIV test, the reason for refusing the test should be explored to ensure it is not due to false information about HIV infection or the consequences of testing.

See: BCCDC Communicable Disease Control Manual Chapter 5 – Sexually Transmitted Infections HIV Pre and Post Test Guidelines September 2011.

MANAGING RESULTS

FOR INDIVIDUALS WHO TEST HIV NEGATIVE

A separate post-test visit is not necessary. Results can be handled as any other negative result is handled in your office. If a patient had a specific concern about HIV, a post-test discussion may be a good opportunity to educate about risk and risk reduction.

FOR INDIVIDUALS WHO TEST HIV POSITIVE

Given the availability of resources, medical education, and support, a primary care provider willing to do so can provide the necessary care in the majority of situations. In a scenario where that is not possible, or in the advanced stages of infection, consideration should be given to shared patient management with clinicians experienced in HIV.

A positive result should be given face to face in a confidential environment and in a clear and direct manner, as is good clinical practice for any situation where bad news is being conveyed.

Consult with HIV specialty care, if required.

Provide linkages to support and care including medical, emotional, nutritional, psychosocial, spiritual and financial, as with other serious medical diagnoses.

As HIV is a reportable infection, a positive HIV result will be sent to local public health officials. Public health nurses have a wealth of information and resources and should be viewed as part of your clinical team in initial management of someone recently diagnosed with HIV infection. They will be involved in the care of individuals and their partners with a new HIV infection. For example, public health nurses can be involved with delivery of the diagnosis, partner notification, and linkage to care.

Counsel on risk reduction. Individuals with recently acquired HIV infection have a much higher potential for transmitting the virus, and safer sexual practices are essential during the acute phase of HIV infection.

With current laboratory standards, false positive tests are exceedingly rare. Nevertheless, since a potential for error exists for diagnostic systems, a second test should be performed to confirm the diagnosis.

NON-ATTENDANCE FOR POSITIVE RESULTS

Notify Public Health as they will have the resources and experience to assist with this issue

INITIAL MANAGEMENT OF POSITIVE HIV TEST

Review the case with your local Public Health office for consultative expertise related to partner notification and if required, linkage to care and supports.

PROVIDING CARE TO PATIENTS DIAGNOSED WITH HIV

Allow sufficient time to discuss the diagnosis with your patient

Refer or consult with a clinician experienced in the treatment and management of HIV infection, if appropriate.

Order the standard baseline testing following HIV diagnosis as follows:

- Repeat HIV Antibody (HIV test)
- HIV plasma viral load
- CD4/CD8 cell counts and ratio
- CBC and differential
- ALT, AST, Alk Phos, GGT, LDH, Bilirubin, INR, and Amylase
- Creatinine (eGFR), Na, K, Cl, HCO3, BUN
- Urinalysis
- Syphilis screen (RPR)
- Urine NAT for Gonorrhea and Chlamydia
- Hepatitis A Total Antibody
- Hepatitis B (HBsAg, anti-HBs Ab, anti-HBc Ab Total)
- Hepatitis C Ab, Hepatitis C RNA
- Toxoplasma IgG
- Pregnancy test (if appropriate)

Offer ongoing support and assess the psychosocial impacts of a recent HIV diagnosis.

Discuss prevention of transmission and disclosure to past and potential future partners. In Canada, nondisclosure of a positive HIV status may have legal implications. These legalities are evolving. For more information, see:

http://www.aidslaw.ca/publications/interfaces/downloadFile.php?ref=2083

http:/ www.aidslaw.ca/publications/interfaces/downloadFile.php?ref=2085

Ongoing care by a primary care provider, with assistance as needed by an expert in HIV care, is extremely important in optimizing patient care.

Provide ongoing care guided by the primary care guidelines and therapeutic guidelines found at the British Columbia Centre for Excellence in HIV/AIDS website pages:

http://www.cfenet.ubc.ca/therapeutic-guidelines/primary-care

http://www.cfenet.ubc.ca/therapeutic-guidelines/adult

RESOURCES FOR CLINICIANS

Local Public Health

Fraser Health

Fraser East	(Chilliwack) 604-864-3437
	(Abbotsford) 604-702-4921
Fraser North	604-777-6709
Fraser South	604-587-7902

Interior Health

Communicable Disease Unit	1-866-778-7736

Northern Health

Northwest	(Ask for the Designated Nurse) 250-631-4228
Northern Interior	778-349-2793
Northeast	(Ask for the Designated Nurse) 250-719-6500

Vancouver Coastal Health

VCH Communicable Disease Control	604-675-3900
	(Ask for Communicable Disease Nurse on call)

Island Health

Central Island	1-866-770-7798
North Island	1-877-887-8835
South Island	1-866-665-6626

BC Centre for Disease Control STI/HIV Prevention and Control

604-707-5600

http://www.bccdc.ca

British Columbia Centre for Excellence in HIV/AIDS (BC-CfE) Rapid Expert Advice and Consultation for HIV (REACH) Line

http://www.cfenet.ubc.ca/REACH

604-681-5748 (Vancouver)

1-800-665-7677 (Outside Vancouver)

BC Women's Hospital & Health Centre Oak Tree Clinic

http://www.bcwomens.ca/Services/HealthServices/OakTreeClinic/default.htm

604-875-2212

1-888-711-3030 (Toll Free in BC)

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