HIV and AIDS: Testing and Reporting Guidelines

Two (2.0) Contact Hours

Acknowledgments
RN.com acknowledges the valuable contributions of...

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Purpose
The purpose of this course is to provide a brief overview of HIV and AIDS, the current state of the epidemic, and how some specific state testing and reporting requirements may be implemented.

This course provides a general overview of several state’s testing and reporting guidelines, but is not specifically approved by any state board of nursing. To access a state approved HIV and AIDS course, please refer to RN.com’s course list and select a course under State Required Courses.

Learning Objectives
After successful completion of this course, you will be able to:
1. Differentiate between HIV and AIDS
2. Outline how HIV is transmitted and the symptoms of HIV
3. Define how HIV is diagnosed
4. Outline at least two criteria in specific states regarding release of information of patients with HIV
5. Identify state resources for HIV information and support, and requirements for physicians, health facilities or licensed laboratories to report a positive HIV test or AIDS diagnosis

Introduction
Acquired immunodeficiency syndrome (AIDS) was first reported in the United States in 1981 and has since become a major worldwide epidemic (Centers for Disease Control and Prevention [CDC], 2001a).

AIDS is caused by human immunodeficiency virus (HIV). By killing or damaging cells of the body's immune system, HIV progressively destroys the body's ability to fight infections and certain cancers. AIDS is the most advanced form of the disease.

People diagnosed with AIDS may get life-threatening diseases called opportunistic infections, which are caused by viruses or bacteria that usually do not infect people with an intact immune system (CDC, 2001a).

HIV/AIDS Statistics in the U.S.
To date, more than one million cases of HIV/AIDS have been reported in the United States, one-quarter of who are unaware of their infection (CDC, 2011). The epidemic is growing most rapidly among minority populations and is a leading killer of African-American males ages 25 to 44.

The CDC has developed an innovative system to estimate the number of new HIV infections (or incidences) for the United States in a given year. Using this long-term, confidential name-based HIV reporting, between 41,200 and 42,100 new HIV infections occurred in the United States per year, between 2006 and 2009.

According to the CDC report in 2009, almost three quarters of HIV/AIDS diagnoses among
adolescents and adults are for males. In 2009, the largest estimated proportion of HIV/AIDS
diagnoses among adults and adolescents were for men who have sex with men (MSM), followed by
persons infected through high-risk heterosexual contact.

In 2009, persons aged 20–24 accounted for the largest proportions of newly diagnosed HIV/AIDS
cases, with age groups 25-49 also highly affected.

African Americans accounted for almost half of the estimated number of HIV/AIDS diagnoses made
during 2009 (CDC, 2011).

More Info

AIDS Surveillance:

Through a uniform system, the CDC receives reports of AIDS cases from all U.S. states. Effective April 2008, all 50 states, the District of Columbia, and 6 dependent areas—American Samoa, Guam, the Northern Mariana Islands, Palau, Puerto Rico, and the U.S. Virgin Islands report data via these standards. This data is used to monitor trends in HIV / AIDS because they are representative of all areas (CDC, 2011).

HIV/AIDS Statistics Around the World
Worldwide, the HIV/AIDS epidemic is at a critical stage. Almost 35 million people are infected. In 2010, 2.7 million people were newly infected, and over 2 million people died from AIDS in 2010 (UNAIDS, 2011).

HIV/AIDS is the leading cause of death in Africa and the 4th leading cause of death worldwide. In Africa alone, the prevalence of HIV infection is at least 35%, decreasing life expectancy in that part of the world by more than 20 years.

Globally, there were an estimated 34 million people living with HIV in 2010. It is estimated that there are 7,000 new cases of HIV each day worldwide (WHO, 2011). Lack of education, stigma, and lack of healthcare resources all contribute to the HIV/AIDS epidemic around the world (UNAIDS, 2011).

Did You Know?
HIV prevalence cannot be measured directly, but is estimated based on the best available data and complex statistical modeling. To derive these estimates, the CDC utilizes information on new HIV & AIDS diagnoses and deaths along with a statistical method called “back-calculation.” As of 2012, all reporting states will have mature systems to assist with accurate statistics (CDC, 2011).

HIV Versus AIDS
The term AIDS applies to the most advanced stages of HIV infection. The CDC developed official criteria for the definition of AIDS and is responsible for tracking the spread of AIDS in the United States.

CDC’s definition of AIDS includes all HIV-infected people who have fewer than 200 CD4+ T cells per cubic millimeter of blood (healthy adults usually have CD4+ T-cell counts of 1,000 or more) or DC4+ cells accounting for fewer than 14% of all lymphocytes.
In addition, the definition includes 26 clinical conditions that affect people with advanced HIV disease. Most of these are opportunistic infections that are often severe and sometimes fatal because the immune system is so ravaged by HIV that the body cannot fight the infection.

Children with AIDS may get the same opportunistic infections as do adults with the disease. In addition, they also have severe forms of the typically common childhood bacterial infections, such as conjunctivitis (pink eye), ear infections, and tonsillitis.

People with AIDS are also particularly prone to developing various cancers, especially Kaposi’s sarcoma, cervical cancer, and lymphomas. These cancers are usually more aggressive and difficult to treat in people with AIDS (CDC, 2012).

**Transmission: Risky Behaviors and Other Means**

HIV can infect anyone who practices risky behaviors such as:

- Sharing drug needles or syringes
- Having sexual contact, including oral, with an infected person without using a condom
- Having sexual contact with someone whose HIV status is unknown

HIV is spread most commonly by having unprotected sex with an infected partner. The virus can enter the body through the lining of the vagina, vulva, penis, rectum, or mouth during sex.

HIV infection can also be transmitted by the following:

- Transmission from mother to infant during pregnancy or birth
- Transmission from mother to infant during breastfeeding
- Contact with infected blood (rare)

HIV is NOT spread through casual contact. Scientists and medical authorities agree that HIV does not survive well in the environment, making the possibility of environmental transmission remote. Scientists have found no evidence that HIV is spread through sweat, tears, urine, or feces.

**Symptoms**

Most people do not have any symptoms when they are first become infected with HIV. They may, however, have a flu-like illness within a month or two after exposure to the virus. Acute illness lasts from one to two weeks and occurs in approximately 50% to 90% of cases.

This illness may include:

- Fever
- Headache
- Fatigue
- Enlarged lymph nodes

These symptoms usually disappear within a week to a month and are often mistaken for those of another viral infection. During this period, people are very infectious, with large numbers of the HIV virus in blood and other body fluids (Mayo Clinic, 2011).
More persistent or severe symptoms may not appear for up to 10 years or more after HIV first enters the body in adults, or within two years in children born with HIV infection. This period of "asymptomatic" infection varies greatly in each individual. Some people may begin to have symptoms within a few months, while others may be symptom-free for more than ten years.

### Symptoms

As the immune system's function declines, a variety of complications start to occur. For many people, the first signs of infection are enlarged lymph nodes. Other symptoms often experienced months to years before the onset of AIDS include:

- Fatigue
- Weight loss
- Frequent fevers and sweats
- Persistent or frequent yeast infections (oral or vaginal)
- Persistent skin rashes or flaky skin
- Pelvic inflammatory disease in women that does not respond to treatment
- Short-term memory loss
- Frequent herpes infections
- Delayed growth in children

(Mayo Clinic, 2011)

### Testing

After the first exposure, there is a two to four week period of intense viral replication before the onset of an immune response and clinical illness. HIV antibody tests can’t detect infection soon after exposure because the immune system needs time to produce antibodies. It generally takes from two to twelve weeks for the antibodies to be detected. During this time a test may show a “false negative.”

Instead of being tested for HIV antibodies, patients who want results about very recent exposures need to be tested using technology that detects and amplifies HIV viral particles directly (PCR) (NYU Center for AIDS Research, 2009).

### Testing: Confidentiality and Support

Many people worry about their confidentiality. They want to know who will have access to their test results within the testing facility, and whether the information will be available to insurance carriers. Ensure that patients have the correct information about who will be able to access their records and under what conditions. Describe the reporting requirements for your healthcare agency, city, and state. In many states, the patient’s name must accompany a report of HIV infection or AIDS. Other states link the patient’s name to a special code or identify patients only by codes. People being tested for HIV need information and emotional support.

During the course of your counseling, ensure that your patients understand the following topics:

- Behaviors that increase the risk of HIV transmission
- How to reduce the risk of transmitting HIV
- The value of treatment for HIV infection

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The value of notifying partners of their exposure
If they need additional services, such as counseling

Evaluate the patient’s support network and coping skills and, if necessary, refer the patient for mental health services.

**CDC Recommendations for HIV/AIDS Testing**

In September 2006, the CDC recommended routine HIV testing in medical settings in order to increase the number and proportion of HIV-infected persons who know their HIV status. This will enable those newly diagnosed with HIV to access HIV care and to take measures to protect their partners from HIV transmission. These recommendations continue today.

The CDC recommendations describe routine voluntary HIV screening as a normal part of medical practice, similar to screening for other treatable conditions.

The CDC recommendations include the following:

- Everyone between the ages of 13 and 64 should routinely be offered testing at least once, with their awareness, and the ability to ‘opt-out’ of HIV testing;
- General consent should be sufficient for HIV testing;
- Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening in healthcare settings; and
- When states have statutory or other regulatory impediments to opt-out screening, or other specific requirements for counseling, written consent, confirmatory testing, or communicating HIV test results that conflict with these recommendations, then jurisdictions should consider strategies to best implement these recommendations within current parameters and consider steps to resolve conflicts with these recommendations (CDC, 2006).

**State Specific Requirements for HIV/AIDS Testing**

Each state has specific guidelines relative to HIV patients, and thus has different testing and reporting requirements. The state-specific standards may be quite similar to the national guidelines, but differences do exist.

**Note!**
Ensure that you are familiar with the specific HIV & AIDS testing and reporting guidelines in your particular state.

Florida (FL), Kentucky (KY), New York (NY), California (CA), and Washington (WA) state specific requirements are included in this course as examples of how HIV/AIDS standards appear. They may differ for your state, but are a good example of items to consider.

A comprehensive list of other states and links to applicable websites dealing with specific state requirements for HIV testing can be accessed by copying and pasting this link into your browser: [http://www.nccc.ucsf.edu/consultation_library/state_hiv_testing_laws/](http://www.nccc.ucsf.edu/consultation_library/state_hiv_testing_laws/). Be familiar with the HIV/AIDS testing and reporting laws for the state in which you work.

Note that the states of Georgia, Iowa and New Mexico have limited state specific HIV/AIDS testing
Components of HIV Testing

The requirements for the HIV testing components differ from state to state. Discussion in this course is adapted from the Compendium of State HIV Testing Laws, National HIV/AIDS Clinicians’ Consultation Center at San Francisco General Hospital, 2007-2011.

The components used as examples of state-specific requirements include:

- Informed consent
- Counseling
- Conditions of testing
- Disclosure
- Testing of minors
- Prenatal
- Labor and delivery
- Neonatal
- Restrictions on use of HIV testing
- Mandatory testing
- Mandatory requirements of education and/or testing
- Reporting
- Confidentiality

Informed Consent

Florida:
Informed consent is required; may be oral or in writing, as long as the test subject is not incapacitated, or otherwise unable to make an informed judgment, or has not reached the age of majority.

Kentucky:
HIV testing is included in general medical consent. No person in this state shall perform a test designed to identify HIV without first obtaining the informed consent of the person upon whom the test is being performed. A person who has signed a general consent form for the performance of medical procedures and tests is not required to also sign or be presented with a specific consent form for HIV testing. A general consent form shall instruct the patient that, as part of the medical procedures or tests, the patient may be tested for HIV infection, hepatitis, or any other blood-borne infectious disease if a doctor orders the test for diagnostic purposes.

Washington:
Informed consent is required; may be oral or in writing; may be obtained separately or as part of other tests; is through an opt-out process- opportunity for questions and declination must be offered.
California:
Specific consent is required through an opt-out process; written consent is not required.

New York:
Informed consent is required in writing, except with rapid testing. Written consent may be incorporated into general medical testing, but must have a section to specifically decline HIV testing.

Counseling
Florida:
Must be provided by providers. Post-test counseling must be done for positive tests with insurance and HMO testing.

Kentucky:
Post-test counseling is required for HIV positive results.

Washington:
All individuals who are tested for HIV receive an individualized risk assessment. A client's individual HIV risk can be determined through risk screening based on self-reported behavioral risk and clinical signs or symptoms. Behavioral risks can be identified either through open-ended questions by the provider, or through screening questions (i.e., a self-administered questionnaire). All pregnant women must have AIDS counseling.

California:
Must be offered to a patient with confirmed HIV positive results and to notified contacts and partners.

New York:
Pre and post-test information is required with negative results; may be through written information and opportunity to ask questions. Provider must give post-test counseling or referral with positive test results.

Conditions of Testing
Florida:
No test result shall be determined positive and no report of a “positive” test given without corroborative tests, with the exception of notice being given to healthcare workers who have been exposed to bodily fluids of the person, or to providers who are responsible for the immediate medical care of the individual when decisions cannot wait for confirmation.

Kentucky:
The results of a test or procedure to determine HIV infection performed under the authorization of a general consent form shall be used only for diagnostic or other purposes directly related to medical treatment.

Washington:
Rapid testing may be used in labor and delivery. Persons may report the results of the rapid test to the individual, in addition to: a) further testing is required, b) the meaning is explained in simple terms, c) the importance of confirmation is enforced, and d) the importance of precautions while awaiting results of confirmatory tests.
California:
HIV counselors may perform rapid testing if authorized under a physician, is trained, and meets other requirements. Patients must be informed of rapid HIV results, and that the result must be confirmed with additional testing.

New York:
Informed consent for rapid testing can be obtained and must be documented in health record. A confirmation test is required prior to releasing results to the patient, except with perinatal testing.

Disclosure
Florida:
Disclosure of HIV status of the victim of a sex offender.

Kentucky:
No specific provisions.

Washington:
Assistance with notifying partner must be offered.

California:
Notification to sexual partners or needle-sharing partners of possible exposure is mandatory.

New York:
Notification to sexual partners or needle-sharing partners of possible exposure is mandatory.

Testing of Minors
Florida:
Minors are able to obtain testing (consultation), examination, and treatment for sexually transmissible diseases in confidence. Providers are precluded from divulging information to parents and guardians in any manner, including an indirect one such as sending a bill for services (with exceptions, see Section 384.29).

Kentucky:
Minors may consent to STD testing and treatment, including HIV.

Washington:
Minors 14 years and older may consent to STD, explicitly including HIV.

California:
Minors 12 years and older may consent to HIV testing and treatment.

New York:
Minors may consent to HIV testing. Physicians may report results to parents, but are not required to.

Prenatal
Florida:
Medical personnel treating pregnant women, including physicians and midwives, for pregnancy-related conditions are required to draw blood for testing for sexually transmissible diseases. However, under current law, the blood cannot be tested for HIV unless the woman consents to this particular
test. The prevailing standard of care requires each healthcare provider to counsel the women to be tested and to include a discussion of the availability of treatment if the test result is positive. If, despite the education and counsel, the pregnant woman refuses HIV testing, reasonable attempts should be made to obtain a statement of such objection, signed by the patient, and placed in the patient’s medical record. Healthcare personnel attending the woman are subsequently immune from liability arising out of or related to the contracting of HIV-infection or AIDS by the child from the mother.

Kentucky:
No specific provisions.

Washington:
Testing of pregnant women is through an opt-out process. Refusal to consent to testing and education must be documented, and reasons must be addressed.

California:
Testing of pregnant women is informed, and through an opt-out process.

New York:
Testing of pregnant women is through an opt-out process. Counseling must be offered to pregnant women in prenatal care.

Labor & Delivery
Florida:
Testing is through an opt-out process, in which documented refusal is needed. Women who appear at delivery or within 30 days postpartum must have HIV testing if no prenatal care or record of HIV test.

Kentucky:
No specific provisions.

Washington:
Testing of pregnant women presenting in labor with unknown HIV is done through an opt-out process; rapid testing can be used.

California:
Testing of pregnant women presenting in labor with unknown HIV is informed, and through an opt-out process. Women who test positive shall receive a referral to a provider or facility specializing in HIV-positive prenatal and post-partum care.

New York:
No specific provisions.

Neonatal
Florida:
No specific provisions.

Kentucky:
No specific provisions.

Washington:

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No specific provisions.

**California:**
No specific provisions.

**New York:**
If no HIV test result is available of a mother known to be HIV infected, an expedited screening of the mother or newborn must be arranged. All newborns must be tested routinely unless religious objection. Counseling consistent with mother’s HIV history should be given. Post-test counseling, healthcare, case management, referral to an HIV specialized facility, and social services must be arranged for a mother of an HIV positive infant.

**Restriction on the Use of HIV Test**

**Florida:**
Testing prohibited for employment or hiring, unless bona fide proof that HIV status is a qualification. Restrictions on release of results.

**Kentucky:**
Testing prohibited for employment or hiring, unless bona fide proof that HIV status is a qualification.

**Washington:**
Testing prohibited for employment or hiring.

**California:**
Testing prohibited for employment or hiring, or for determining health insurance eligibility.

**New York:**
Testing is a requirement by clinical labs and blood and tissue banks. Testing prohibited as a condition of admission or services for alcoholism treatment. Testing prohibited for employee or resident applicants at a family shelter.

**Mandatory Testing**

**Florida:**
Potential transmission to victims; all inmates; all prisoners with confirmed or suspected STD; individuals charged with a sexual offense or prostitution; all inmates upon prison release; part of probation or conditional release; exposure of correctional officer or healthcare employee; blood, plasma, organ, skin, or tissue donations.

**Kentucky:**
Convicted sexual offenders; prostitution convictions; inmates with exposure or high risk activities; juveniles with specific sex offenses; blood, organ, or human tissue donations; residents of healthcare facility in case of exposure.

**Washington:**
Convicted sexual offenders; prostitution convictions; drug convictions; exposure to law enforcement or prison employees; any prisoner with possible risk; professional boxers.

**California:**
Convicted sexual offenders (including juveniles); prostitution convictions; juveniles under authority of
DYA; persons charged with a crime with potential exposure to victim; request for testing from law enforcement or inmate; prisoners at potential risk; occupational exposure; periodic anonymous testing of inmates; boxers or martial artists; blood, organ, or anatomical donations.

New York:
Convicted sexual offenders (including juveniles) when requested by the victim; defendants indicted for a sexual offense with victim request; occupational exposure; persons arrested for prostitution; mandated by court order; mandatory newborn screening for HIV; blood, sperm, ova and tissue donations; testing of high risk children in foster care.

Mandatory Offering of Education and/or Testing
Florida:
Notification of a person with a positive test result shall include information on the availability of appropriate medical and support services, the importance of notifying partners who may have been exposed, and methods of preventing transmission of HIV. Notification of a person with a negative test result shall include information on preventing the transmission of HIV.

Kentucky:
Each county mandated for voluntary HIV testing. Current information on HIV testing mandated for Public Health. Each state employee to receive educational material on HIV/AIDS annually. Post-secondary educational institutions to provide HIV/AIDS information to all transfer students and freshmen.

Washington:
Providers conducting HIV testing deliver information about HIV and HIV testing to clients. This information must be culturally, linguistically, developmentally, and medically appropriate, and include:
A.) The benefits of learning HIV status and the potential dangers of the disease;
B.) A description of the ways HIV is transmitted and how it can be prevented;
C.) The meaning of the test results and the importance of obtaining test results; and,
D.) As appropriate, the availability of anonymous HIV testing and the differences between anonymous testing and confidential testing. This information can be provided either in a face-to-face meeting with a counselor or in a pamphlet, informed consent form, brochure, or video.

California:
Counseling and information must be offered to pregnant women by prenatal care providers.

New York:
Practitioners are required to offer HIV testing to everyone between 13-64 receiving health services. State must sponsor free STD testing. Pregnancy-related services must offer STD testing. Needle exchange programs must provide prevention education. Testing and education within facilities for alcoholism and youth chemical dependency. Education and testing for occupational exposure.

Reporting
Florida:
Medical doctors, osteopathic physicians, naturopaths, veterinarians, chiropractors, laboratories, and hospitals are mandated reporters for sexually transmitted diseases. The CDC’s HIV/AIDS Reporting System (HARS) is used. When a test is performed in a hospital emergency department, detention facility or other facility from which the test subject is released before being notified of positive test results, the county health department becomes responsible for notifying the test subject. Medical
personnel involved in the delivery of a child are permitted to note the results of a mother’s HIV test into the child’s chart. Healthcare workers, employees of child-caring or child-placing agencies, foster families, adoptive parents, employees of residential facilities that care for developmentally disabled persons, etc. may be informed of a positive test result of a child or otherwise dependent person on a “need to know” basis. A physician, in good faith, may decline to provide a particular treatment requested by a particular patient if the appropriateness of that treatment can be determined only through a HIV test. Schools are notified only with the consent of the test subject.

**Kentucky:**
Name-based reporting, using reporting system surveillance, assessment, and regulations. Physicians and Medical Laboratories shall report positive test results for HIV infection or a diagnosis of AIDS that meets the definitions of AIDS established within the Centers for Disease Control and Prevention (CDC) guidelines and reported in the Adult or Pediatric HIV/AIDS Confidential Case Report Form.

**Washington:**
Rules for notification of partners at risk of HIV infection:
(1) A local health officer or authorized representative shall: a) within three days of receipt of a report of HIV infection, contact the HIV-infected person, as indicated, for the purpose of providing assistance in notifying sex or injection equipment-sharing partners, including spouses, that they may have been exposed to and infected with HIV and that they should seek HIV pretest counseling and HIV testing; b) provide assistance notifying partners.
(2) A healthcare provider shall not disclose the identity of an HIV-infected individual or the identity of at-risk partners, including spouses, except as authorized in regulations.
(3) Local health officers and authorized representatives shall contact the HIV-infected individual to provide post-test counseling or to carry out an investigation of conduct endangering the public health or of behaviors presenting an imminent danger to the public health and destroy documentation of referral information established under this subsection, containing identities and identifying information on the HIV-infected individual and at-risk partners of that individual, immediately after notifying partners or within three months of the date information was received, whichever occurs first unless such documentation is being used in an active investigation of conduct endangering the public health or of behaviors presenting an imminent danger to the public health.
(4) A healthcare provider may consult with the local health officer or an authorized representative about an HIV-infected individual and the need for notification of partners at any time.

**California:**
Name-based reporting, using reporting system surveillance, assessment, and regulations. All CD4+ T cell results related to cases of diagnosed HIV by clinical lab to the local health officer within 7 days. Peace officers must report cases of occupational exposure. Health department must report number of HIV-infected infants born to high-risk populations.

**New York:**
Name-based reporting, using reporting system surveillance, assessment, and regulations. Requirements present for reporting of contacts, after death, exposure, and clinical lab. Reporting occurs to the Commissioner of all cases. No laboratory shall notify a physician or other authorized person of HIV results based solely on antibody screening, but may provide a preliminarily report of HIV finding with a written request.

**Confidentiality**

**Florida:**
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Anonymous testing is available through public health departments. Any individual with a history of a positive HIV test who commits a criminal transmission of the HIV virus through any sexual act in which there is a transmission of bodily fluids may be convicted and sentenced separately for this crime, in addition to conviction for any other sex-related crime. Convictions are not based simply on the exposure to HIV and are not dependent upon the victim's development of an HIV-infection. This crime is considered a felony. This includes all acts of abuse, acts of prostitution, sex with a minor, and sexual battery. Any individuals who are HIV-infected, know of the infection, and have been once informed that they may communicate this disease by donating blood, plasma, organs, etc., and continue to do so despite this knowledge, may also be convicted of a felony based on this behavior.

**Kentucky:**
Healthcare providers must use professional discretion to maintain confidentiality for HIV-infected patients. No person who has obtained or has knowledge of a test result in Kentucky shall disclose or be compelled to disclose the identity of any person upon whom a test is performed, or the results of the test in a manner which permits identification of the subject of the test, except in specific cases provided by law. Physicians, health facilities or laboratories licensed in Kentucky must report any positive HIV test or AIDS diagnosis to the Department for Public Health within five business days of the diagnosis.

Whenever possible, the adult or pediatric "HIV/AIDS Confidential Case Report Form" should be used, and submitted according to the following guidelines:

A.) A report for a resident of Jefferson, Henry, Oldham, Bullitt, Shelby, Spencer and Trimble counties shall be submitted to the HIV/AIDS Surveillance Program of the Louisville-Metro Health Department, and

B.) A report for a resident of the remaining Kentucky counties shall be submitted to the HIV/AIDS Surveillance Program of the Kentucky Department for Public Health, or as directed by the HIV/AIDS project coordinator.

**Washington:**
All staff involved in HIV testing and counseling activities with access to testing results and counseling information must sign a confidentiality statement acknowledging their awareness and understanding of:

A.) The legal requirements under state and federal law not to disclose HIV/AIDS information, and

B.) The legal and agency consequences of such a disclosure.

**California:**
HIV test results are confidential, with exceptions to confidentiality. Penalties occur for unauthorized disclosure of HIV results. HIV antibody test results can’t be conveyed to patient by electronic means. Court orders may allow for test results in a criminal investigation for knowingly transmitting HIV. Disclosure to forensic specialists, cases of exposure, testing of wards of CA Youth Authority, to funeral directors.

**New York:**
HIV test results are confidential, with exceptions to confidentiality (see disclosure). Penalties occur for unauthorized disclosure of HIV results.

**Diagnosis**
Because early HIV infection often causes no symptoms, healthcare providers usually diagnose it by testing for the presence of antibodies to HIV. HIV antibodies generally do not reach noticeable levels
in the blood for one to three months following infection. It may take the antibodies as long as six months to be produced in quantities large enough to show up in standard blood tests. Therefore, patients who may have been recently infected may need to be screened for the presence of HIV genetic material. Direct screening of HIV is extremely critical in order to prevent transmission of HIV from recently infected individuals.

The most common tests to determine the presence of HIV are the ELISA/Western Blot tests. (ELISA is an acronym for enzyme–linked immunoassay.) This is a set of blood tests used in the diagnosis of chronic infection with human immunodeficiency virus (HIV). The HIV ELISA is a screening test for the diagnosis of HIV infection. There are a number of conditions that can cause a false positive ELISA, including lupus, Lyme disease, and syphilis. If the ELISA test is positive, it must be confirmed with a second test called the Western Blot, which is more specific and will confirm if someone is truly HIV positive (NYU Center for AIDS Research, 2009).

**Treatment**

Because HIV can become resistant to individual drug therapies, healthcare providers must use a combination treatment to effectively suppress the virus. When multiple drugs (three or more) are used in combination, it is referred to as **highly active antiretroviral therapy**, or HAART, and can be used by people who are newly infected with HIV as well as people with AIDS.

For many people, quality of life dramatically improved with HAART medications. Previously disabled individuals returned to work or school and are fully enjoying their family and friends. For them, HIV has become a manageable chronic condition.

Goals of therapy include the following:

- Improve quality of life
- Reduce HIV-related morbidity and mortality
- Restore and/or preservation of immunologic function
- Maximal and durable suppression of viral load

Initiation of antiretroviral therapy should be based on viral load, CD4-lymphocytes, and clinical parameters (HIV Management.org, 2009).

**HAART suppresses HIV, but cannot eradicate it.**

**HAART Therapy**

There are several classes of anti-retroviral medications that are used in combination to create “HAART” therapy. These include the **nucleoside reverse transcriptase inhibitors (NRTIs)**, **non-nucleoside reverse transcriptase inhibitors (NNRTIs)**, **protease inhibitors (PIs)** and **fusion inhibitors (FIs)**. Despite the beneficial effects of HAART, potentially severe side effects are associated with the use of antiviral drugs. There have been reports of complications and other severe reactions, including death, to some of the antiretroviral nucleoside analogs when used alone or in combination. Therefore, healthcare experts recommend that patients on antiretroviral therapy are closely followed by their healthcare providers.

The issue of adherence to HAART regimen cannot be over-emphasized. HIV-infected patients must
take all of their HAART medications precisely as prescribed to fully obtain their benefits. Because HAART medications suppress HIV replication but do not eradicate the virus, even one missed dose a week may allow HIV to rebound (HIV Management.org, 2009).

For more information on these groups of medications, see the RN.com course “HIV and AIDS: An Overview”.

Opportunistic Infections and Cancer
HIV-positive patients are at a greater risk for opportunistic infections (OIs). You may see your HIV-positive patient on antibiotic or other therapies that you are not familiar with. Remember that OIs can be deadly to your HIV-positive patient.

One of the key nursing responsibilities is to protect your HIV patients from infections. Part of the guidelines for caring for HIV patients is assuring that they have followed the most current immunization protocol. The protocol outlines which immunizations are recommended for all or some HIV patients, and which are not recommended for HIV patients (CDC, 2012).

AIDS Associated Opportunistic Infections
The AIDS associated opportunistic infections (OIs) and cancers include:

- Pneumocystis Carinii Pneumonia (PCP)
- Kaposi’s Sarcoma (KS)
- HIV wasting syndrome
- Non-Hodgkin’s lymphoma
- Cryptococciosis, extrapulmonary
- HIV encephalopathy (AIDS Dementia)
- Herpes simplex virus infection
- Candidiasis of the esophagus, trachea, bronchi, or lungs
- Cryptosporidiosis, chronic intestinal
- Cytomegalovirus disease (CMV)
- Tuberculosis (outside of the lungs)
- Mycobacterium Avium Intracellulare (MAC or MAI)
- Progressive Multifocal Leukoencephalopathy (PML)
- Primary lymphoma of the brain
- Toxoplasmosis of the brain
- Histoplasmosis
- Isosporiasis, chronic intestinal
- Coccidioidomycosis
- Salmonella septicemia
- Lymphoid interstitial pneumonia/pulmonary lymphoid hyperplasia, <13 years
- Bacterial infections, recurrent, <13 years
- Pulmonary tuberculosis
- Invasive cervical cancer
- Recurrent bacterial pneumonia (two or more episodes in one year)

People who are positive for HIV and have one of these conditions meet the criteria for AIDS. However, not every person who has one of the above conditions has AIDS.

Prevention
Because no vaccine for HIV is available, the only way to prevent infection by the virus is to avoid behaviors that put an individual at risk of infection, such as sharing needles and having unprotected sex.

Many people infected with HIV have no symptoms. Therefore, there is no way of knowing with certainty whether a sexual partner is infected unless he or she has repeatedly tested negative for the virus and has not engaged in any risky behavior.
Infection Control
Healthcare personnel are at risk for occupational exposure to bloodborne pathogens, including hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

Exposures occur through needlesticks or cuts from other sharp instruments contaminated with an infected patient's blood or through contact of the eye, nose, mouth, or skin with a patient's blood.

Important factors that influence the overall risk for occupational exposures to bloodborne pathogens include the number of infected individuals in the patient population and the type and number of blood contacts.

Transmission of HIV to patients while in healthcare settings is rare; however, proper sterilization and disinfection procedures are required.

Most exposures do not result in infection (CDC, 2009).

Healthcare Workers - Protect Yourselves!
To protect yourself from HIV and other blood-borne pathogens, follow your hospital’s policies and procedures for universal precautions or body substance isolation, including using gloves, goggles, gowns, and other protective equipment. Universal precautions pertain to the following body fluids (CDC, 1988):

- Blood
- Semen
- Vaginal secretions
- Cerebrospinal fluid
- Synovial fluid

Universal precautions do not apply to the following body fluids unless they contain visible blood (CDC, 1988):

- Feces
- Nasal secretions
- Sputum
- Sweat
- Pleural fluid
- Peritoneal fluid
- Pericardial fluid
- Amniotic fluid
- Body tissues
- Tears
- Urine
- Vomitus
- Saliva

Always use barriers to prevent skin and mucous membrane exposure to blood and body fluids. Gloves are the most important barrier and should be worn when caring for every patient. Change gloves between patients and wash your hands immediately after removing your gloves. Always wear gloves during the following situations (CDC, 2009):

- Handling blood, body fluids, mucous membranes, or nonintact skin
- Handling items or surfaces soiled with blood or body fluids
- Performing phlebotomy when healthcare workers have cuts, scratches, or skin breaks
- Performing phlebotomy when contamination with blood is likely, such as with uncooperative patients
- Performing finger or heel sticks for infants and children

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• Learning how to perform phlebotomy

In addition to gloves, other equipment (protective eyewear, face shields, and masks) may be needed to prevent exposure of mucous membranes of the mouth, nose, and eyes. Mucous membranes are especially vulnerable during procedures that generate splashes or droplets. Also wear gowns or aprons if you expect splashes of blood or body fluids (CDC, 2009).

Many healthcare organizations use body substance isolation, which considers all body fluids infectious. But special isolation procedures are still needed to control certain infections. For example, nurses may need to follow droplet precautions for influenza, respiratory isolation for pulmonary tuberculosis, or contact isolation for methicillin-resistant Staphylococcus aureus. Review the infection-control practices in your healthcare organization (CDC, 2009).

**Needlestick Injuries**
Each year more than 600,000 healthcare workers, usually nurses, are injured with contaminated needles or other sharps and risk becoming infected with HIV or other blood-borne infections, such as HBV or HCV (The Joint Commission [TJC], 2001).

According to the 2006 Study of Needlestick Injuries and Safety Devices, three out of ten U.S. directors of infection control believe clinicians do not always engage the safety mechanism of a syringe.

Creating a needlestick prevention program within a facility can help to educate clinicians and other staff about the importance of the proper use of all safety syringes and other infection control devices (TJC, 2009).

Infection is possible under the following conditions (National Institute for Occupational Safety and Health [NIOSH], 2000):

- The sharp is visibly contaminated with blood
- The needle was directly in the patient’s vein or artery
- The injury was deep
- The injury is caused by a hollow-bore needle
- A relatively large amount of blood or infected body fluid is involved
- The patient is terminally ill

**Needlestick Injuries & Legislation**
Many states have laws governing needlestick injuries. Because the content of these laws differs widely from state to state, investigate the regulations for reporting incidents in your state.

The federal Needlestick Safety and Prevention Act (2000) also requires employers to meet the following requirements (NIOSH, 2009):

- Review exposure-control plans yearly to incorporate changes in technology that could help reduce exposure to bloodborne infections.
- Involve nonmanagerial workers to evaluate and select safety devices.
Maintain a log of sharps injuries that ensures employees’ privacy. The log must contain at least the type and brand of device involved in the injury, the location of the injury, and a description of the incident.

**Prevention of Needlestick Injuries**
The National Institute for Occupational Safety and Health recommends the following strategies to help prevent needlestick injuries (NIOSH, 2009):

- Eliminate needles when safe and effective alternatives are available
- Use devices with safety features and evaluate their effectiveness
- Analyze injuries from needles and other sharps to identify hazards
- Train healthcare workers to safely use and dispose of sharps
- Modify work practices that put healthcare workers at risk
- Encourage timely reporting and follow up of all sharps-related injuries
- Evaluate the effectiveness of prevention practices and provide feedback on performance
- Stay up to date about risk factors and ways to prevent injuries
- Encourage all employees to report hazards for sharps-related injuries
- Encourage vaccination with HBV vaccine

**Testing and Treatment after a Work-Related Exposure**
If you think you were exposed to HIV or other bloodborne infections, notify your supervisor immediately and follow your organization’s policy for post-exposure testing and treatment. Waiting until the end of a work shift may decrease the effectiveness of treatment.

Needlesticks and other sharps-related exposures are the most common route of HIV transmission in healthcare settings. The risk of becoming infected after a single stick depends on the amount of blood or fluid injected, but is estimated to be 0.3% for each exposure. That’s about three times greater than the risk following a single mucous membrane exposure of 0.09% (NIOSH, 2009).

Antiretroviral medication may reduce the risk of infection, but to be effective, post-exposure prophylaxis must begin as soon as possible after the exposure. The choice of medications and the duration of treatment depend on the kind of injury and the person who was injured. Many patients whose blood accidentally infected a healthcare worker may harbor drug-resistant HIV. The choice of medications used to treat needle-stick injuries may depend in part on the history of medications used to treat the original patient, as well as results from genotypic resistance tests (Beltrami et al., 2003).

Additional treatment may be needed for exposures to HBV, HCV, or other bloodborne diseases. Regardless of your decision to receive post-exposure prophylaxis following an exposure, you need a medical evaluation, counseling, and HIV testing. For current CDC recommendations for testing and treatment following an occupational exposure, see the “Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis” at www.aidsinfo.nih.gov (CDC, 2001b).
Conclusion
In this course, you learned:
HIV is a complicated and devastating disease. One of the key changes seen over the past several decades is the extended survival time of persons with HIV. This presents new and different challenges to the patient and the healthcare provider.

Keeping abreast of current standards in HIV management and reporting are critical pieces of understanding the complete picture of HIV and AIDS.

References


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