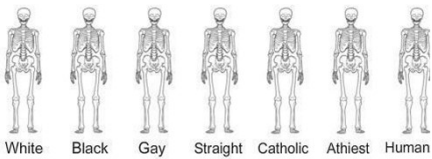


ONLY MEN WOMEN AND CHILDREN GET AIDS



CATHY ROBINSON PICKETT


FRIENDS-TOGETHER, INC
FOUNDER AND DIRECTOR

1

Conflict of Interest Statement

- I have no real or perceived conflicts of interest.
- I will not be making any prescribing recommendations or endorsing any pharmaceutical.

2

Objectives 

- ❖ Update basic facts of HIV/AIDS.
- ❖ Provide recent HIV/AIDS statistics.
- ❖ Discuss legal and ethical issues.
- ❖ Discuss modes of transmissions.
- ❖ Discuss Common Opportunistic Infection
- ❖ Discuss Concepts and ethics of Counseling and Testing.
- ❖ Societal impact of HIV.
- ❖ Participants will complete the course with a basic understanding of HIV.
- ❖ Participants will complete the course with a firm knowledge of legal confidentiality with regards to HIV/AIDS.
- ❖ Participants will understand the implications and limitations of HIV testing.
- ❖ Participants will complete the course with a firm knowledge of community referral resources.

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General Information

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History of HIV

- ❖ 1981 -- First cases of AIDS became known to the CDC in Los Angeles, New York, San Francisco
- ❖ GRID Gay-related Immune Deficiency
- ❖ Homosexual and bisexual men in California and New York were becoming sick with rare opportunistic diseases
 - Men were typically 20 to 49 years old
 - Immune systems had ceased to function properly
- ❖ 1982 -- Acquired Immune Deficiency Syndrome
- ❖ 1984 -- Human Immunodeficiency Virus HIV
- ❖ 1985 -- Test developed to detect antibodies to the HIV virus
- ❖ 1987 -- First drug to treat HIV identified
- ❖ 1995 -- First Protease Inhibitor approved and widely used
- ❖ 1995 -- Combination Therapy becomes common
- ❖ 2010 -- Single dose combo therapy common

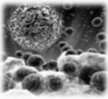
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What is HIV?

- HIV (Human Immunodeficiency Virus)
 - It is the virus that can lead to Acquired Immune Deficiency Syndrome, or AIDS
 - First recognized in 1981 and was termed G.R.I.D.

There are two types of HIV:

- ❖ HIV-I
 - Primarily seen in the Americas
 - Most easily spread through anal intercourse
- ❖ HIV-II
 - Primarily present in Africa and Europe
 - Most easily spread through vaginal intercourse



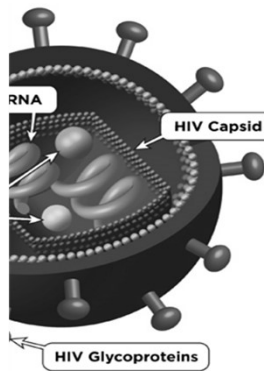
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What is A.I.D.S.?

- Acquired Immune Deficiency Syndrome
- Occurs when an HIV infected person exhibits one or more of the following:
 - Wasting—loss of 30% of body weight in a short time
 - Has 1 of 26 opportunistic infections
 - CD4+ count falls below 200/mL³ of blood



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Key to Terms

HIV capsid: HIV's core that contains

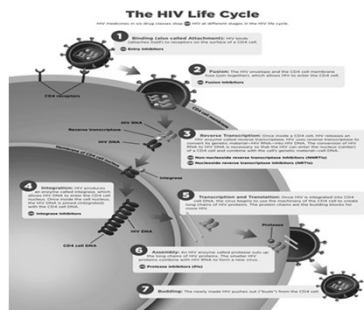
HIV envelope: Outer

HIV enzymes: Proteins that carry out steps in the HIV

HIV glycoproteins: Proteins embedded in the HIV

HIV RNA: HIV's genetic

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Window Period

- The period of time between HIV infection and the production of antibodies
- This period can last between 2 – 12 weeks, and in some cases up to six months
- During the “*window period*”, a person is infectious but may not test positive with common HIV antibody testing

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AIDS PANDEMIC

"We all have AIDS... The earth has AIDS" Donald Berwick

34.2 million people living with HIV. 2.6 million newly infected. 1.8 million died of AIDS, including 260,000 children.
2010

68% of cases are in Africa. Emerging epidemics in China & India may exceed Africa

75% of cases are heterosexual transmissions



"AIDS is more devastating than any terrorist attack or weapon of mass destruction."
Colin Powell

Each year = 5 million new infections & 3 million deaths (500,000 children)

More than 50% of cases occur in women

Worldwide, the majority of people with HIV are undiagnosed & untreated.

WHO AIDS Epidemic Update, December 2011

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Every 9 1/2 minutes someone in the U.S. is infected with HIV

Get the facts
NineAndAHalfMinutes.org

ACT against AIDS


CDC

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AIDS in the U.S. vs. Florida
 56,300 new HIV cases in 2009... 11% in Florida.

~125,000 people living with HIV/AIDS in FL

Among Hispanics age 25 - 44, AIDS is the #3 cause of death in men and #4 in women



530,757 AIDS DEATHS

More than 1 million HIV Infections

25% new HIV cases are people under 25. In 13 to 19-year-olds, half in females.

The #2 cause of death in Blacks aged 25-44. #1 for black women 25-44. In Florida it is #1 cause of death for men and women.

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The Epidemic in Florida

Population in 2013: 19.3 million → (4th in the nation)

Newly diagnosed** HIV infections in 2013: 4,864 (2nd in the nation in 2011)

Newly diagnosed** AIDS cases in 2013: 2,532 (3rd in the nation in 2011)

Cumulative pediatric AIDS cases reported through 2013: 1,547 (2nd in the nation in 2011)

Persons diagnosed and living*** with HIV disease through 2013: 106,335 → (3rd in the nation in 2010)

HIV prevalence estimate through 2013: 126,000 (11.4% of the U.S. estimate for 2010)

HIV Incidence Estimates in 2012: 4,056 (There was a 19% decrease from 2007-2012)

HIV-related deaths in 2013: 935 (Up 1.3% from 2012)

57% White
15% Black
24% Hispanic
4% Other*

29% White
49% Black
20% Hispanic
2% Other*

*Other = Asian/Pacific Islanders; American Indians/Alaskan Natives; multi-racial.
 **Data by year of diagnosis for 2013 are incomplete and should be interpreted with care
 ***Living (prevalence) data as of 06/30/2014

FLORIDA HEALTH

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Florida Statistics

❖ In 2014, 6,132 people newly reported with HIV infection in Florida, 15 were among children younger than 13 years of age. Of the adult cases (those older than 13 years of age):

- ❖ 80% were males
- ❖ 41% were black, 31% white, 26% Hispanic and 2% multi-races

❖ The five leading counties in Florida reporting the highest number of HIV cases in 2014 were:

1. Miami-Dade (N=1,411)
2. Broward (N=993)
3. Orange (N=503)
4. Hillsborough (N=443)
5. Palm Beach (N=398)

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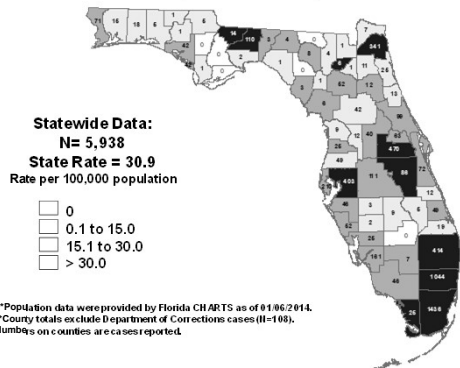
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According to the CDC

- ❖ Youth aged 13 to 24 accounted for an estimated 26% of all new HIV infections in the United States in 2010.
- ❖ Most new HIV infections among youth occur among gay and bisexual males; there was a 22% increase in estimated new infections in this group from 2008 to 2010.
- ❖ Over 50% of youth with HIV in the United States do not know they are infected.
- ❖ Americans aged 50 and older have many of the same HIV risk factors as younger Americans.
- ❖ Persons aged 55 and older accounted for 26% (313,200) of the estimated 1.2 million people living with HIV infection in the United States in 2011.
- ❖ Older Americans are more likely than younger Americans to be diagnosed with HIV infection later in the course of their disease.

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HIV Infection Case Rates* by County of Residence,** Reported in 2013, Florida



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Signs and Symptoms

•Latency or incubation period

- the point from which a person becomes infected with HIV until they begin to experience life threatening opportunistic infections and conditions
- on average, ten years
- Asymptomatic - being infected with HIV but have no physical indications

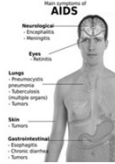
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HIV/AIDS Symptoms

Some symptoms may include:

- chronic headaches, night sweats,
- diarrhea, vomiting
- rashes, sores
- assorted aches and pains, & neurological dysfunctions
- other manifestations.



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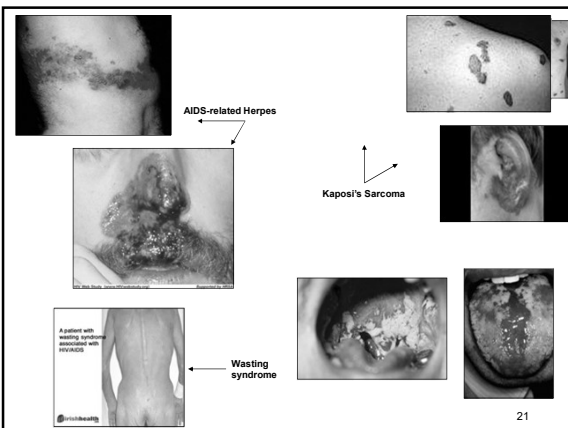
Common Opportunistic Infections in Patients Diagnosed with AIDS

- ✓ Tuberculosis
- ✓ Lymphoma
- ✓ Esophageal Candidiasis
- ✓ Cervical Cancer
- ✓ Pneumocystis Pneumonia
- ✓ Kaposi's Sarcoma
- ✓ Mycobacterium
- ✓ Toxoplasmosis
- ✓ Chronic Herpes Simplex ulcers, duration >1 year
- ✓ Wasting syndrome



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Factors Affecting HIV

- Unsafe Sex with multiple sexual partners
- Unprotected sex with an HIV+ person
- Others STIs
- Sharing needles
- Blood transfusion or blood products before 1985
- Drug use

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Transmission

•Fluids which commonly transmit HIV

- Semen and pre-ejaculatory fluid
- Vaginal fluids
- Blood
- Breast milk
- Sweat is the only body fluid from which HIV has **not** been isolated



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HIV is Not Transmitted By:

Casual Contact such as:

- Kissing
- Hugging
- Sharing bathroom facilities
- Sharing utensils, glasses, dishes
- Being bitten by mosquitoes
- Shaking hands
- Caring for an individual that is HIV+

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Modes of Transmission

- **Sexual contact** with an infected person
- **Mother to child**
 - during pregnancy, childbirth, or breastfeeding
 - virtually all babies born to women who are HIV+ will test positive for HIV antibodies when they are born
- **Blood-to-blood contact**
 - sharing needles, blood transfusion, tattooing, sharing razor blades, body piercing

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Prevention

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Steps to reduce the risk of a sexually acquired HIV are:

- Abstaining from sex
- Reducing the number of sexual partners
- Using a condom or latex barrier consistently during sexual contact
 - (N-9 is not recommended)
- Avoiding sex with people who have multiple partners or are engaging in other high-risk activity
 - (i.e. commercial sex or injecting drug use)
- Obtaining treatment for other STDs.

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There are many different types of condoms.

- ✓ Polyurethane condoms
- ✓ Lubricated condoms
- ✓ Non-lubricated condoms
- ✓ **Lambskin**
- ✓ Colored condoms
- ✓ Tuxedo condoms
- ✓ Latex condoms
- ✓ Flavored condoms
- ✓ Different sized condoms
- ✓ Glow in the dark condoms
- ✓ Ribbed/Tickler condoms
- ✓ Female condoms



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**Prevention:
Injection Drug Use**



- **Risk Reduction:**
- Abstaining from injecting drugs
- Abstaining from sharing needles, syringes, cookers, and other injecting equipment
- Cleaning used needles and syringes three times with bleach and rinsing with water three times.

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Prevention

- Transfusions & blood products
 - Blood banks have greatly reduced the risk of becoming infected from a blood transfusion through detailed screening processes
- Casual Transmission
 - HIV is **NOT** transmitted through casual contact



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Occupational Risk

- Occupational transmission of HIV to health care workers is extremely rare.
- CDC recommends proper use of safety devices and barriers to prevent exposure to HIV in the health care setting.
- Fewer than 60 cases of occupational transmission of HIV to health care workers have occurred in the United States. The proper use of gloves and goggles, along with safety devices to prevent injuries from sharp medical devices, can help minimize the risk of exposure to HIV in the course of caring for patients with HIV. When workers are exposed, the Centers for Disease Control and Prevention (CDC) recommends immediate treatment with a short course of antiretroviral drugs to prevent infection.
- As of 2010, 57 documented transmissions and 143 possible transmissions had been reported in the United States.
- No confirmed cases of occupational HIV transmission to health care workers have been reported since 1999. Underreporting of cases to CDC is possible, however, because case reporting is voluntary.
- Health care workers who are exposed to HIV-infected blood at work have a 0.3% risk of becoming infected. In other words, 3 of every 1,000 such injuries, if untreated, will result in infection.

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Prevention: Perinatal Transmission Risk Reduction

- Pregnant women are given HIV tests in the 1st and 3rd tri-semester in the standard prenatal testing. If a woman does not want an HIV test, she has to opt out.
- combination therapy during pregnancy to reduce maternal viral load
- Taking AZT during labor and birth to help protect the baby while it's exposed to HIV in blood and cervical secretions
- Choosing the birth option that poses the least risk to both mother and baby – a normal vaginal birth or an elective cesarean section
- Administering AZT to the newborn for up to six weeks after birth
- Bottle-feeding formula or breast milk from a milk bank instead of breast feeding or bottle-feeding the baby the mother's own breast milk.

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HIV Prevention Counseling

- **A process that is aimed at personal risk reduction by helping clients identify and commit to a specific behavior change step.**
- should be tailored to address the personal risk of the client
- should be used in HIV risk assessments and in pre-test and post-test counseling sessions
- Risk assessment



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HIV and TB

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What is TB?

- Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*
- It is airborne or spread from person to person through the air
- TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine.
- A person with TB can die if they do not get treatment

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HIV and TB

- People living with HIV are more likely than others to become sick with TB.
- Worldwide, TB is one of the leading causes of death among people living with HIV

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HIV and TB

- Without treatment HIV and TB can work together to shorten lifespan
- Untreated latent TB infection and HIV infection is much more likely to develop TB disease during the lifespan of patient than someone without HIV infection
- Among people with latent TB infection, HIV infection is the strongest known risk factor for progressing to TB disease
- HIV infection and TB disease has an AIDS-defining condition

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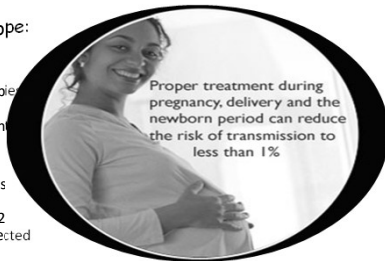
HIV & Pregnancy

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In the United States and Europe:

Most HIV-infected mothers and their babies receive anti-HIV medications to prevent mother-to-child transmission of HIV.

Less than 2% of babies born to HIV-infected mothers (fewer than 2 babies in 100) are infected with the virus



Proper treatment during pregnancy, delivery and the newborn period can reduce the risk of transmission to less than 1%

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Pregnant Women Should Be Tested for HIV:

- At initial prenatal care visit
- Again at 28 – 32 weeks *
- With a rapid HIV test during labor if no prenatal care or 2nd test after 27 weeks

* 20% of HIV-infected babies (2000 – 2007) were born to moms who became infected during the pregnancy.

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ARV Prophylaxis in Pregnancy

- Combined antepartum, intrapartum, and infant ARV prophylaxis is recommended to prevent perinatal transmission of HIV. (A1)
- ARV drugs reduce perinatal transmission by several mechanisms, including:
 - Lowering maternal antepartum viral load (VL)
 - Providing infant pre- and post-exposure prophylaxis

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Intrapartum Care

<p>Known HIV Status</p> <ul style="list-style-type: none"> • Continue ART on schedule during labor and before scheduled C-section. • Give IV ZDV to women with VL >400 (or unknown VL) near delivery, regardless of antenatal regimen or mode of delivery. (A1) • IV ZDV may not be required for women on ART with VL <400 (BII) however viral load near delivery is needed and some experts disagree on the discontinuation of IV AZT administration 	<p>Unknown HIV status</p> <ul style="list-style-type: none"> • Conduct rapid HIV antibody testing for women in labor with unknown HIV status. • If positive: <ul style="list-style-type: none"> • Perform confirmatory testing ASAP • Administer maternal IV ZDV and infant combination prophylaxis pending results of confirmatory test. • Continue infant prophylaxis for 6 weeks if confirmatory tests are positive ; discontinue prophylaxis if confirmatory testing is negative.
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Infant Antiretroviral Prophylaxis

- ❖ All HIV-exposed infants should receive a 6 week course of ZDV prophylaxis
- ❖ Mother received standard antepartum and intrapartum ARV prophylaxis with suppressed HIV RNA: infant zidovudine alone
- ❖ Mother did not receive optimal antepartum and intrapartum prophylaxis, risk of HIV transmission is higher, and additional infant ARVs may be recommended

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HIV & STDs

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Increased Susceptibility

- STDs appear to increase susceptibility to HIV infection by two mechanisms:
 - Genital ulcers
 - Inflammation

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Genital Ulcers

- Result in breaks in the genital tract lining or skin
- These breaks create a portal of entry for HIV
 - Syphilis
 - Herpes
 - Chancroid

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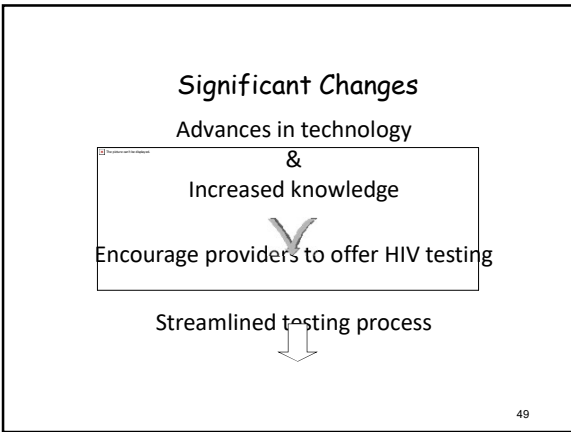
Inflammation

- Resulting from genital ulcers or non-ulcerative STIs increase the concentration of cells in genital secretions that can serve as targets for HIV
 - Chlamydia
 - Gonorrhea
 - Trichomoniasis

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Testing

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Commonly, there are four different ways that an HIV test is done:

- A blood draw
Blood specimen; sent to state lab; takes two weeks for results; ELISA & Western Blot performed for confirmatory results
- OraSure
Oral specimen only; sent to state lab; takes two weeks for results; ELISA & Western Blot performed for confirmatory results
- OraQuick
Oral swab or blood from finger-prick; results appear within 20-40 min.; results are not confirmatory (i.e., rapid reactive or rapid non-reactive)
- Clearview
Self contained blood draw kit; results appear within 5 to 15 minutes.

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OraQuick Advance HIV Test

Touch specimen loop to blood droplet

Collect blood, dip loop into test tube

Use loop to stir specimen in developer solution



Insert device and read results after 20 minutes

HEALTH

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Rapid HIV Testing

- Results available in 20 - 40 minutes
- 99.6% accurate
- Must be followed with a confirmatory test


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Clearview

Clearview Complete Testing Kit

- Two easy steps
- Results available in minutes
- Built in control ensures accuracy
- Reactive results **MUST** be confirmed by standard HIV test




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Testing: Antibody Tests


- This testing procedure isolates the antibody to HIV and not the virus itself
- Specimens of human serum (blood), plasma, dried blood spots, mucosal transudate from the mouth, and urine can be used to test for HIV antibodies
- *Highly sensitive* in populations that exhibit behaviors known to lead to increased risk of HIV infection
- The antibody test used most often is the **Enzyme-Linked Immunosorbent Assay (EIA)**
- The confirmatory test used in the state laboratory generally is the *Western Blot*





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Testing: Test Results



- **Negative** HIV Antibody Test
 - usually indicates that no infection is present or that the tested individual has recently been infected
- **Positive** HIV Antibody Test
 - usually indicates the individual *is infected* and is capable of infecting others
- **Indeterminate** HIV Antibody Test
 - may indicate seroconversion is taking place

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HIV Test Requirements

- ❖ Pretest counseling not required
- ❖ Mini-course on HIV prevention
- ❖ No requirement for return visit

Minors


- ❖ Parental consent not required if child is able to make an informed decision.
- ❖ Age no longer specified in rule.

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Informed Consent

- Sound and reasonable standard
- ❖ Eplanation of Test
- ❖ Uses and Limitations
- ❖ Procedures
- ❖ Testing is Voluntary
- Take into consideration
- ❖ Age
- ❖ Mental Capacity
- ❖ Language skills –check with supervisor for translator information.



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**EXCEPTIONS TO INFORMED
CONSENT REQUIREMENT**

- ❖ Bona Fide Medical Emergencies
- ❖ Necessary to provide appropriate care and treatment to patient
- ❖ Victims of Criminal Offenses
- ❖ Certain Blood and Tissue Donation
- ❖ Medically indicated for a hospitalized infant, but parent(s) or legal guardian cannot be located.
- ❖ Source of a significant exposure to medical personnel or those who rendered emergency medical assistance.
- ❖ Court Ordered

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Confidentiality

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Notification of Results

- All reasonable efforts
- Providers determine process for notification ensuring confidentiality
- Negatives - information on preventing HIV, as appropriate
- Positives - Information on:
 - Available medical and support services
 - Notifying partners
 - HIV prevention

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Notification of Third Parties

- Law protects health care practitioners regulated through the Division of Medical Quality Assurance
- “Privilege to Warn”



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DOH Standards for Confidentiality

- Do not leave information unattended where it will be visible to others.
- All information that is mailed is double-enveloped and sent via traceable mail.
- HIV/AIDS information is not faxed without permission.

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Legally Effective Releases

- ❖ Specific Release
- ❖ Prior written authorization
- ❖ Test subject authorizes the release of HIV test result with a general medical release

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Court Orders

- ❖ Medical record with an HIV test result may not be released with a subpoena.
- ❖ Contact HEALTH INFORMATION MANAGER
- ❖ Court order required

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Warning Statements

- ❖ Up to doctor's discretion
- ❖ Must accompany disclosure
- ❖ Legal counsel, from HD, advised before disclosure

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Record Keeping

Do not mark, code or otherwise distinguish records on the outside

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Permitted Disclosure

- ❖ Test subject
- ❖ Legally authorized representative
- ❖ Significant exposures
- ❖ For reporting purposes
- ❖ Mother's HIV test in child's medical record
- ❖ Among health care providers involved in the care and treatment of a test subject.
- ❖ Foster care or adoption of an HIV+ child.
- ❖ Employees of residential facilities or community-based care programs for developmentally disabled persons.

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Breaches

- ❖ Disciplinary action by licensing chapter
- ❖ Misdemeanor of the first degree
- ❖ Third degree felony if done maliciously or for monetary gain



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Significant Exposure

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Medical and non-medical personnel exposed during course of employment or emergency treatment can:

- ❖ Obtain available test results;
- ❖ Test without consent when:
 - Source will not consent or can not be located
 - Blood previously obtained for other purposes or obtained during emergency treatment
 - Source expires
 - Court order
- Information cannot be documented in source's medical record without consent

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Must Do's

- ❖ **Physician must:**
 - Document exposure
 - State test is medically necessary for treatment
 - Report positive tests only.
 - Indeterminate and unconfirmed positives should not be reported.
 - Adult or Pediatric HIV/AIDS confidential case report form – within two weeks. (patient information listed in rule)
- ❖ **Medical or nonmedical personnel must:**
 - Take an HIV test; or
 - Provide results of an HIV test taken within 6 months of the exposure, if test result is negative.
 - Laboratory collecting the specimen or receiving the initial order shall report within 3 working days of receipt of test results.

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New Reporting Administrative Rules

- ❖ Social security number must be reported by laboratories, if available.
- ❖ Requesting physician must provide the required information to the laboratory.

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Resources

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Florida Resources

- Florida Dept. of Health, Bureau of HIV/AIDS
 - Phone: 850-245-4422
 - Website: http://www.doh.state.fl.us/disease_ctrl/aids/index.html
- Online Sunshine
 - Website: <http://www.leg.state.fl.us/>

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HIV Patient Care Programs

- HIV/AIDS Case management services
- AICP – AIDS Insurance Continuation Program
- HOPWA – Housing Opportunities for People w/ AIDS
- ADAP – AIDS Drug Assistance Program
- TOPWA – Targeted Outreach for Pregnant Women's Act
- Support groups
- Medical and Dental Services

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Perinatal Prevention Programs

- Targeted Outreach for Pregnant Women Act (TOPWA)
- The Perinatal Project at the University of South Florida provides ongoing education to obstetricians, midwives, labor and delivery staff, and others
- Baby RxPress Program provides free AZT for the first six weeks of life to families of exposed newborns who have no other way to pay for this medication
- Local “Mama Bear Coalitions” meet regularly to ensure individual HIV-infected pregnant women get needed services


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Legal Issues



- *FL law provides penalties for those who breach the confidentiality of a person who has taken an HIV test or is HIV+ or has a case management or medical record*
 - Super confidentiality!!
 - Need-to-know basis
 - Such a breach could result in a fine, jail time, and/or loss of job
 - FL DOH staff: “double locked” – security policy 7



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Omnibus AIDS Act - 1988

- The Act:
 - Creates an environment where people are likely to agree to or seek out testing.
 - Prohibits HIV testing without a person’s knowledge.
 - Gives the patient special rights to control who learns of the HIV test results.
 - Prohibits discrimination against persons who have or are thought to have HIV infection.

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Legal Issues




- Discrimination:
 - **Americans with Disabilities Act**
 - Illegal to use HIV infection to discriminate in employment, housing, etc.
 - Illegal to discriminate against those who treat HIV/AIDS patients
- Insurance companies; HMOs
 - Guidelines for medical tests
 - Cannot cancel or not renew policies because of HIV/AIDS

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What does the epidemic look like today in our neighborhood?



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Only men, women and children get AIDS



Show your care. Wear the Red Ribbon.
Thank you to all those people who have helped us.

The personal story of your neighborhood.....



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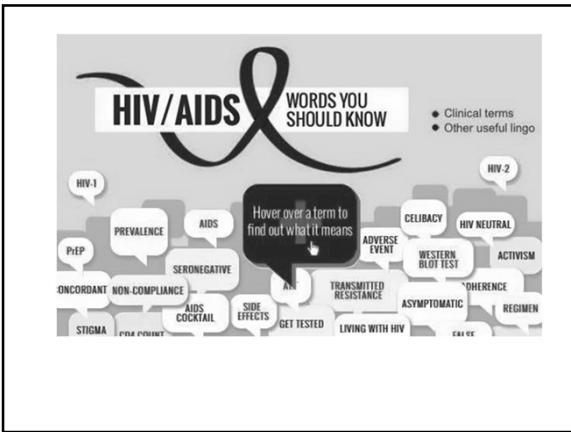
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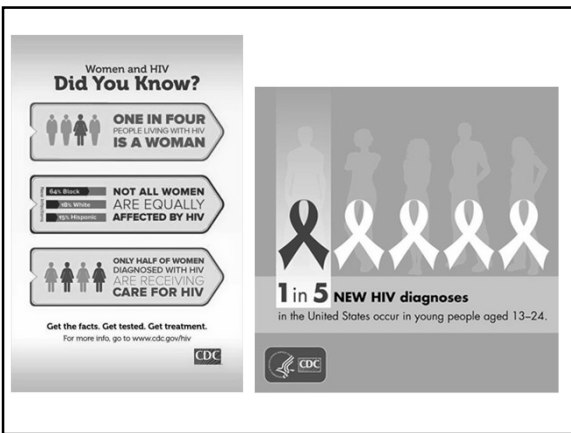
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Cathy Robinson Pickett

- Website
- www.FriendsTogether.org
- Email
- hiveducation@aol.com
- Facebook
- Friends-Together
- Cathy Robinson Pickett



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