

Approved by  
the Florida State Board of Cosmetology

# Florida "6" Hour Initial Licensure Course

For Cosmetologists, Nail Technicians, Facial Specialists, and Full Specialists

Presented by  
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**Florida 4 Hour Initial Licensure Course (4 hours)**  
For Cosmetologists, Nail Technicians, Facial Specialists and Full Specialist

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**HIV/AIDS and Other Communicable Diseases**

**(a) Modes of Transmission**

**Objectives:**

- Define HIV and AIDS
- Identify the origination of HIV and AIDS
- Explain how HIV is transmitted
- Identify Other Communicable Diseases

**(b) Infection Control Procedures**

**Objectives:**

- List the symptoms of HIV infection
- Define ways to avoid infecting others

**(c) Clinical Management**

**Objectives:**

- Describe the reliability of HIV testing
- Describe the stages of HIV infection
- List the types of studies and clinical trials performed by the AIDS Healthcare Foundation
- List opportunistic infections related to AIDS
- Define the term antiretroviral

**(d) Prevention of HIV and AIDS**

**Objectives:**

- List pro-active measures that help prevent HIV infection
- List the diseases that condoms are reported to protect against

**(e) Attitudes towards HIV and AIDS**

**Objectives:**

- Describe issues of behavior and communication concerning HIV
- List the considerations that a person with HIV has on a personal level
- List the considerations that a person with HIV has on a professional level

**(f) Appropriate behavior in dealing with persons who may have the virus or syndrome**

**Objectives:**

- Describe the International Labor Organization's role regarding workplace attitudes
- Explain the US Dept. of Labor's SHARE program
- Define the Share program's effectiveness

## (a) Modes of Transmission

### ➤ HIV/AIDS Defined

**HIV** is the **acronym** (a word formed from the initial letters or groups of letters of words in a set phrase or series of words) for **H**uman **I**mmunodeficiency **V**irus. This virus causes AIDS. **Being infected with HIV, however, is not the same as having AIDS.** People who have tested positive for HIV have been known to stay healthy for years, even decades, with proper treatment. Over time, in many cases, a long time, HIV slowly weakens the immune system until AIDS develops.

**AIDS** is the **acrostic** (first, last, or other particular letters when taken in order spell out a word or phrase) for **A**cquired **I**mmunodeficiency **S**yndrome. In medicine, a syndrome is a group of symptoms that all together indicate the presence of a disease. When a person has AIDS, his or her body has been weakened to the point where it is not longer able to effectively fight disease. As a result, many other health problems develop when a person has AIDS.

### ➤ Origination

In the United States, AIDS and HIV hit the headlines in the early 1980s. In 1982, public health officials began using the term “acquired immunodeficiency syndrome” or AIDS. Formal tracking of AIDS cases in the United States began in 1982. The following year, scientists participating in an international committee discovered HIV as the cause of AIDS.

With time and research, it has become clear that HIV and AIDS existed decades before 1982. In the mid- to late-1970s, doctors in Los Angeles and New York noted growing numbers of gay men developing rare types of pneumonia, cancer and other illnesses.

An analysis of a blood sample taken from a man in 1959 in Kinshasa, Democratic Republic of Congo, uncovered HIV-1. **(HIV-1 is the most widespread type of HIV in the developed world.)** Genetic analysis of the blood sample suggests that HIV-1 may have developed from a single virus in the late 1940s or early 1950s.

Precisely how and when HIV came to exist is still being studied. In 1999, an international research team discovered HIV-1 in a group of chimpanzees native to west equatorial Africa. They have suggested that HIV-1 spread to humans when hunters became exposed to infected chimpanzee blood.

### ➤ HIV is transmitted by:

- ▶ Having unprotected (sex without a condom) sexual intercourse (vaginal or anal) with someone who has HIV.
- ▶ Having unprotected oral sex with someone who has HIV. The risk goes up if there is ejaculation in the mouth. The risk rises still higher if either partner has cuts or sores in the mouth from recent tooth brushing, bleeding gums, canker sores or other sexually transmitted diseases (STDs)
- ▶ Sharing needles or syringes with someone who is HIV infected
- ▶ Sharing needles, syringes or drug works with someone infected with HIV
- ▶ Pregnancy, childbirth or breast-feeding if the mother has HIV infection

**HIV is spread only when someone is exposed to blood, semen, vaginal fluid or mother's milk from someone who is infected with HIV.** The virus doesn't live long in the open environment outside the body. There is virtually no evidence that HIV infection can be spread from tears or sweat. Even saliva has a very little viral content. (The risk goes up, however, if either person has blood in their mouth from cuts, open sores or gum disease.)

HIV infection can't be spread by day-to-day contact at work, school or social settings. Shaking someone's hand, hugging them, using the same toilet, drinking from the same glass, being nearby when someone with HIV coughs or sneezes – none of these activities spreads HIV infection. Even open-mouthed kissing is relatively low risk. During a mosquito bite, the mosquito injects its own saliva into the person it is biting. It is not injecting blood from the last person the mosquito bit. Mosquito saliva can carry infections such as malaria, dengue fever, yellow fever or

West Nile virus. That is how a person can get those infections from a mosquito bite. HIV cannot be transmitted in that way.

The chance of getting infected while being tattooed is low because HIV can't survive well in the open air. Tattooing if precautions aren't used can spread other diseases, including hepatitis. Using disposable needles, proper cleaning and sterilization of equipment eliminates much of the infection risk from tattooing.

While a woman with HIV who is pregnant can spread the virus to her child during childbirth or pregnancy, it doesn't happen as often as you might expect. A pregnant woman with HIV who receives no treatment at all, will give birth to an HIV-infected baby about 25% of the time. With today's antiretroviral therapy, however, the rate of transmission from mother to child has dropped to about 2%.

**Estimated numbers of AIDS cases and deaths 2002-2006**

<b>Year</b>	<b>Estimated Number of AIDS Cases</b>	<b>Estimated Number of Deaths Among Persons with AIDS</b>
2006	36,828	14,016
2005	36,552	16,268
2004	37,726	16,395
2003	38,538	16,690
2002	38,132	16,948

### ➤ **Tuberculosis & HIV**

Tuberculosis, also known as TB, is the leading infectious killer of people living with HIV, and accounts for an estimated 13% of AIDS deaths worldwide. HIV and TB are so closely connected that they are often referred to as co-epidemics or dual epidemics. The epidemics drive and reinforce one another: HIV activates dormant TB in a person, who then becomes infectious and able to spread the TB bacillus to others.

Untreated, someone with active tuberculosis will infect an estimated 10 to 15 people per year. The Stop TB Strategy is the internationally recommended standard for preventing, diagnosing and treating TB and includes recommendations for managing TB in people living with HIV. Recently a new TB strain, extensively drug resistant TB (XDR TB), has emerged, which is particularly dangerous for people living with HIV in whom it is frequently fatal. Preventing the development and spread of drug resistant TB through greater investment in TB services, improved community case finding and adherence support, and more effective infection control are essential.

To appropriately respond to both epidemics and avoid more widespread drug resistance, care and prevention of both diseases should be priority concerns of all TB and HIV programs. UNAIDS, the Stop TB Partnership and the World Health Organization (WHO) are together encouraging a concerted, coordinated global effort to control TB in people living with HIV. In addition, [the Stop TB Partnership has formed the TB/HIV Working Group, which develops global policy on the control of HIV-related TB and advises on how those fighting against TB and HIV can work together.

These partnerships have led to the creation of policies and guidelines to deal with HIV-related TB, and countries and organizations have taken important steps towards integrating their HIV and TB responses. However, more collaborative action is needed to widely implement programs, including those that:

- ✓ Offer HIV testing and counseling to all TB patients
- ✓ Screen all people living with HIV for TB disease

- ✓ Provide TB treatment or preventive therapy to all co-infected people
- ✓ Provide cotrimoxazole and antiretroviral treatment to all TB patients with HIV
- ✓ **Ensure TB infection control in all health care facilities and high HIV prevalence settings**

## ➤ HIV/AIDS and Viral Hepatitis

### **Hepatitis B Testing and Vaccination**

Hepatitis B virus (HBV) and human immunodeficiency virus (HIV) are bloodborne viruses transmitted primarily through sexual contact and injection drug use. Because of these shared modes of transmission, a high proportion of adults at risk for HIV infection are also at risk for HBV infection. HIV-positive persons who become infected with hepatitis B virus (HBV) are at increased risk for developing chronic HBV infection and should be tested. In addition, persons who are co-infected with HIV and HBV can have serious medical complications, including an increased risk for liver-related morbidity and mortality. To prevent HBV infection in HIV-infected persons, the Advisory Committee on Immunization Practices recommends universal hepatitis B vaccination of susceptible patients with HIV/AIDS.

### **Hepatitis C and HIV/AIDS Co-Infection**

About one quarter of HIV-infected persons in the United States are also infected with hepatitis C virus (HCV). HCV is a bloodborne virus transmitted through direct contact with the blood of an infected person. Thus, co-infection with HIV and HCV is common (50%–90%) among HIV-infected injection drug users. HCV is one of the most important causes of chronic liver disease in the United States and HCV infection progresses more rapidly to liver damage in HIV-infected persons. HCV infection may also impact the course and management of HIV infection. The U.S. Public Health Service/Infectious Diseases Society of America guidelines recommend that all HIV-infected persons be screened for HCV infection.

**Hepatitis A** - is an acute liver disease caused by the hepatitis A virus (HAV), lasting from a few weeks to several months. It does not lead to chronic infection.

**Transmission:** Ingestion of fecal matter, even in microscopic amounts, from close person-to-person contact or ingestion of contaminated food or drinks.

**Vaccination:** Hepatitis A vaccination is recommended for all children starting at age 1 year, travelers to certain countries, and others at risk.

**Hepatitis B** - is a liver disease caused by the hepatitis B virus (HBV). It ranges in severity from a mild illness, lasting a few weeks (acute), to a serious long-term (chronic) illness that can lead to liver disease or liver cancer.

**Transmission:** Contact with infectious blood, semen, and other body fluids from having sex with an infected person, sharing contaminated needles to inject drugs, or from an infected mother to her newborn.

**Vaccination:** Hepatitis B vaccination is recommended for all infants, older children and adolescents who were not vaccinated previously, and adults at risk for HBV infection.

**Hepatitis C** - is a liver disease caused by the hepatitis C virus (HCV). HCV infection sometimes results in an acute illness, but most often becomes a chronic condition that can lead to cirrhosis of the liver and liver cancer.

**Transmission:** Contact with the blood of an infected person, primarily through sharing contaminated needles to inject drugs.

**Vaccination:** There is no vaccine for hepatitis C.

**Hepatitis D** - is a serious liver disease caused by the hepatitis D virus (HDV) and relies on HBV to replicate. It is uncommon in the United States.

**Transmission:** Contact with infectious blood, similar to how HBV is spread.

**Vaccination:** There is no vaccine for hepatitis D.

**Hepatitis E** - is a serious liver disease caused by the hepatitis E virus (HEV) that usually results in an acute infection. It does not lead to a chronic infection. While rare in the United States, hepatitis E is common in many parts of the world.

**Transmission:** Ingestion of fecal matter, even in microscopic amounts; outbreaks are usually associated with contaminated water supply in countries with poor sanitation.

**Vaccination:** There is currently no FDA-approved vaccine for hepatitis E.

	Hepatitis A					
	2006	2005	2004	2003	2002	2001
No. of Acute Clinical Cases Reported	3,579	4,488	5,683	7,653	8,795	10,616
Estimated No. of Acute Clinical Cases	15,000	19,000	24,000	33,000	38,000	45,000
Estimated No. of New Infections (current)	32,000	42,000	56,000	61,000	73,000	93,000

	Hepatitis B					
	2006	2005	2004	2003	2002	2001
No. of Acute Clinical Cases Reported	4,758	5,494	6,212	7,526	8,064	7,844
Estimated No. of Acute Clinical Cases	13,000	15,000	17,000	22,000	no data	
Estimated No. of New Infections (current)	46,000	51,000	60,000	73,000	79,000	78,000

	Hepatitis C					
	2006	2005	2004	2003	2002	2001
No. of Acute Clinical Cases Reported	no data					
Estimated No. of Acute Clinical Cases	3,200	3,400	4,200	4,500	4,800	3,900
Estimated No. of New Infections (current)	19,000	21,000	26,000	28,000	29,000	24,000

### ➤ STDs and Viral Hepatitis

#### Hepatitis A

Transmission of hepatitis A virus (HAV) during sexual activity occurs due to fecal-oral contact or contamination. Measures typically used to prevent the transmission of other STDs (e.g., use of condoms) do not prevent HAV transmission. Vaccination is the most effective means of preventing HAV transmission among persons at risk for infection.

#### Hepatitis B

Among adults seeking treatment in STD clinics, as many as 10%–40% have evidence of past or current hepatitis B virus (HBV) infection. Many of these infections could have been prevented through universal vaccination during delivery of STD prevention or treatment services. A study of adults diagnosed with acute hepatitis B found that 39% had sought care or been screened for an STD before they were infected with HBV, indicating a significant missed opportunity to vaccinate at-risk persons when they first access STD prevention or treatment services.

## Hepatitis C

Although not common, hepatitis C virus (HCV) can be transmitted through sexual activity. The factors found to be associated with sexual transmission of HCV are sex with multiple partners, presence of other STDs, or sex with trauma. Case-control studies have reported an association between acquiring HCV infection and exposure to a sex contact with HCV infection or exposure to multiple sex partners. Surveillance data also indicate that 15%–20% of persons reported with acute HCV infection have a history of sexual exposure in the absence of other risk factors.

### (b) Infection Control Procedures

#### ➤ **Know the Signs of HIV/AIDS**

One thing that has allowed HIV infection to spread so far so fast is the lack of symptoms at first. **Many people infected with HIV for 10 or more years have no symptoms of illness.** They can still infect other people during this time unless they practice safe sex.

The only way to know if you are infected is to be tested. Because a test is a snapshot of your health at one given time, it is wise to be tested periodically. It can take three to five months from exposure to HIV infection to when HIV can be found in a blood test.

When HIV infection begins to make an **impact on a person's immune system**, he or she may show **signs** such as:

- A deep tiredness that cannot be explained
- A dry cough
- A fever that comes and goes
- **Blotches that can be red, brown, pink or purplish under the skin or inside the mouth, nose or eyelids**
- Diarrhea that lasts for more than a week
- Heavy night sweats
- Memory loss, depression or other neurological disorders
- Rapid weight loss
- Swollen lymph glands in the armpits, groin or neck
- White spots or odd blemishes on the tongue, mouth or throat

Having these symptoms doesn't mean a person has HIV or AIDS. Many illnesses have symptoms like these. Only an HIV test can make certain whether a person has HIV or not.

The AIDS Healthcare Foundation operates the largest private HIV and STD testing program in California. It also offers testing in Florida. These testing facilities can be found in a variety of settings, including mobile vans.

You can also ask your health care provider to give you an HIV test.

As with other diseases, the earlier HIV infection is discovered, the more effectively it can be treated.

#### ➤ **Telling Others You Have HIV**

Knowing who to tell when you learn that you have HIV can be a challenge. You may not feel like telling anyone. On the other hand, letting the right people know can help you feel better. You won't have to keep secrets from those close to you. You'll be able to talk about what's in your mind and important to you.

#### **It's extremely important that you:**

- Tell anyone with whom you have had sex. This can be difficult. It's essential that they be told so they can be tested and get treatment, if necessary. Knowing if they have HIV can help them from spreading it to others.
- **Tell anyone you plan to have sex with.** Practicing safe sex will help protect your health and that of any partners. In some states, not telling a sexual partner you have HIV before having sex is a felony.
- Tell your doctor and dentist. This helps them give you the right kind of care. As medical professionals, they have an obligation to keep this information private and confidential. A doctor or dentist cannot refuse to treat you because you have HIV.

It can be difficult to tell others. Some people may not be well informed about HIV. They may find it hard to accept that you have this disease. Some people may end their friendship with you or reject you in a dating situation. Often, you won't know how someone will respond until you tell him or her.

### **(c) Clinical Management**

You can have – and spread – HIV for up to 10 years without having any symptoms of HIV or AIDS. HIV affects each individual differently. It is possible to look and feel healthy for years. The only sure way to know if you have HIV infection is to get tested.

**Today, testing for HIV is more reliable than tests for many other diseases. The accuracy in establishing whether a person does – or does not – have HIV infection is quite high and reliable.** Usually when a test comes back HIV positive, the test is repeated or other test are done to check for viral genetic material in body fluids and cells to confirm the first test results.

Knowing if you have HIV, gives you the power to seek treatment when it will be most effective. It also makes it possible for you to avoid spreading the infection to others.

### **How HIV Progresses to AIDS**

People commonly talk as if there is the infection (HIV) and then there is the disease (AIDS). HIV actually has several stages. HIV can move through these stages slowly or quickly.

Studies of people who don't receive treatment for HIV show that about half of HIV-infected people progress to AIDS within 10 years of being infected. Three out of four HIV-infected people progress to AIDS within 15 years of infection.

Children who are born with HIV and people who got HIV through a blood transfusion tend to get sick more quickly.

The stages of HIV tend to follow the pattern highlighted below, although actual times vary a great deal from one person to another:

#### **Time After Infection Stage**

<b>3 to 6 months</b>	<b>HIV spreads within the body and becomes detectable when an HIV test is done.</b>
1 to 10 years	A person is HIV, but healthy.
3 to 10 years	Minor symptoms may appear.
8 to 12 years	Symptoms of HIV or AIDS begin to appear.

### **When HIV Becomes AIDS**

AIDS is the last stage of HIV-infection. A doctor can make the diagnosis of HIV infection that has become AIDS.

**This diagnosis is based on guidelines established by the Centers for Disease Control.**

Since 1996, powerful virus-fighting drugs have been introduced that dramatically delay the progression of HIV to AIDS. Other new treatments and drugs are now being used to treat illnesses associated with AIDS.

## ➤ Clinical Trials

- **Biomedical research**

is biological research in the interests of medicine and it typically involves human subjects at various stages in the development of drugs, vaccines or techniques. By its very nature, biomedical research raises myriad ethical issues, which become increasingly complex as medicine advances and the scope of research and clinical trials widens internationally.

In 1964, the World Medical Association issued The Declaration of Helsinki, which set out ethical guidelines for physicians engaged in biomedical research. Updated periodically, the declaration is the fundamental document in this field and has influenced the formulation of international, regional, and national legislation and codes of conduct. Before prospective products come to human trials, they are developed and tested for safety using animal models, in the laboratory. The data obtained from laboratories form the basis on which decisions are made regarding human trials and registration of new drugs for use in the health services. It is imperative therefore that the data be high quality, rigorous and trustworthy, and WHO is in the forefront of setting standards for good laboratory practice.

- **Nutritional Care**

Good nutrition plays an important role in maintaining the health of people living with HIV. Adequate nutrition is essential to maintain a person's immune system, to sustain healthy levels of physical activity, and for quality of life. Adequate nutrition is also necessary for optimal benefits from antiretroviral therapy.

In many of the countries most heavily affected by HIV, food scarcity and poverty make adequate nutrition nearly impossible. Food is part of a comprehensive antiretroviral therapy package and food and nutrition support needed into programs for the prevention of mother-to-child transmission. Such assistance not only contributes to the health of HIV-infected mothers and their newborns, but also helps reduce economic burdens associated with childbirth and HIV infection.

Nutrition should become an integral part of the countries response to HIV. In particular, UNAIDS Program recommend strengthening political commitment to nutrition and HIV within the national health agenda, reinforcing nutrition components in HIV policies and programs, and incorporating HIV issues into national nutrition policies and programs.

One of the populations most vulnerable to malnutrition due to food scarcity and poverty is children, especially infants. Lack of breastfeeding exposes children to increased risk of malnutrition and life-threatening infectious diseases other than HIV, especially in the first year of life. The United Nations recommends that infants be exclusively breastfed for the first six months of life, and that thereafter infants should receive nutritionally adequate and safe complementary foods while breastfeeding for up to 24 more months. However, breastfeeding by HIV-infected mothers significantly increases the risk of HIV transmission to the infant. Therefore, when replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first months of life and should then be discontinued as soon as it is feasible. To help HIV-positive mothers make the best choice, they should receive counseling and have access to follow-up care and support, including nutritional support.

- **Caregiver**

The strains on those caring for people living with HIV are enormous, and without adequate and reliable support the risk of 'burnout' is high.

Much of the stress experienced by carers is in the nature of the work itself—they are dealing with a disease that kills largely young people and is heavily stigmatized, and most carers in poor countries do not have the means to provide life saving treatment which is widely available in high-income countries.

Managing stress and burnout requires measures to strengthen the capacity of the individual carer to cope with the duties and responsibilities of the role.

It means ensuring that the working conditions, policies and practices of care programs offer a supportive environment. And it means advocating national policies and laws that are sensitive to the needs of carers.

**Antiretroviral** drugs are medications for the treatment of infection by retroviruses, primarily HIV.

**AIDS Healthcare Foundation (AHF)** has over ten years of experience with anti-retroviral (ARV) studies, including:

- **Studies of new ARV medications, both before and after FDA approval**
- Studies for people who already take ARV medications and are failing, as well as studies for people who have not yet begun ARV therapy
- Studies comparing different combinations of ARV medications
- Studies to reduce the number of pills a person must take, and to reduce dosing frequency
- Women's studies, looking at the quality of life for women with HIV
- Studies examining obstacles that prevent people from taking their ARV medications as prescribed
- Research into related conditions such as Hepatitis C and neurological disorders

Anti-retroviral therapy doesn't cure AIDS, nor does it prevent the spread of HIV. Antiretrovirals do, however, extend life and improve the quality of life while living with HIV.

As HIV progresses, the immune system becomes weakened. The body isn't able to defend itself against common bacteria and viruses that a healthy immune system can do easily. **These are called opportunistic infections because they take advantage of the weakened immune system.** If you are on antiretroviral therapy, you can go along time before developing opportunistic infections.

**Some of the more common opportunistic infections are:**

- **Cryptosporidiosis (Crypto)** - a disease caused by protozoan parasites of the genus *Cryptosporidium*, characterized by fever and gastrointestinal symptoms and typically spread via contaminated drinking water.
- **Cytomegalovirus (CMV)** - a common virus of the herpes virus family, usually harmless or causing mild colds but capable of producing severe systemic damage in infected newborns and immunosuppressed persons.
- **Hepatitis C (Hep C)** - inflammation of the liver, caused by a virus or a toxin and characterized by jaundice, liver enlargement, and fever.
- **Human papilloma virus (HPV)** - a species of virus that causes genital warts.
- **Mycobacterium avium complex (MAC)**- MAC bacteria are common in the environment and cause infection when inhaled or swallowed. Symptoms of MAC diseases are reminiscent of tuberculosis. They include fever, fatigue, and weight loss. Pulmonary involvement is similar to TB, while diarrhea and abdominal pain are associated with gastrointestinal involvement. MAC should always be considered in a person with HIV infection presenting with diarrhea.
- **Pneumocystis carinii pneumonia (PCP)**- a pulmonary infection caused by the protozoan *Pneumocystis carinii*, occurring as an opportunistic disease in persons with impaired immune systems, as AIDS victims.
- **Toxoplasmosis (Toxo)**- infection with the parasite *Toxoplasma gondii*, transmitted to humans by consumption of insufficiently cooked meat containing the parasite or by contact with contaminated cats or their feces: the illness produced is usually mild, but in pregnant women may damage the fetus.
- **Tuberculosis (TB)**- an infectious disease that may affect almost any tissue of the body, esp. the lungs, caused by the organism

**Antiretroviral drugs:**

Anti-retroviral drugs are powerful. Taken in combinations of two or more drugs at a time, they can keep HIV infection

in check for long periods. **Antiretroviral drugs have reduced the death rate from HIV/AIDS by 80%**. At the same time, they have made dramatic improvements in the quality of life for people who have HIV infection.

**At the same time, anti-retroviral drugs have side effects of their own and can cause interactions for other drugs that a person may need to take for opportunistic infections.**

#### **(d) Prevention of HIV and AIDS**

While global prevalence of HIV infection (percentage of persons infected with HIV) appears to have stabilized in recent years, the global number of people living with HIV is increasing because of ongoing accumulation of new infections with longer survival times, measured over a continuously growing general population.

Across the world, a small but growing number of countries have reduced HIV prevalence through sound prevention efforts. The high rates of transmission of HIV result largely from failure to use the available and effective prevention strategies and tools, and poor coverage of HIV prevention programs. HIV prevention services were only reaching 20% of people in need in 2005, while coverage for key populations at higher risk of exposure to HIV were considerably lower.

Effective HIV prevention programming focuses on

- the critical relationships between the epidemiology of HIV infection
- the risk behaviors that expose to HIV transmission and
- addresses the collective social and institutional factors such as
  - sexual norms
  - gender inequality
  - and HIV related stigma, that will otherwise continue to fuel HIV epidemic

Risk behaviors are enmeshed in complex webs of

- economic
- legal
- political
- cultural and
- psychosocial determinants that must be analyzed and addressed by policies that are also effectively implemented, and through scaled-up programming

Comprehensive HIV prevention requires a combination of programmatic and policy actions that promote

- safer behaviors
- reduce vulnerability to transmission
- encourage use of key prevention technologies
- promote social norms that favor risk reduction and
- address drivers of the epidemic

Effective prevention efforts focus on measures that directly support risk reduction by providing information and skills as well as access to needed commodities (such as condoms, sterile injecting equipment, and drug substitution therapy) for the populations most in need. In short, national planners and policymakers must: 1) Know their epidemic; and 2) Set priorities accordingly.

Prevention and treatment must be scaled up in a balanced way, to capitalize fully on synergies between the two.

Comprehensive HIV prevention requires a combination of programmatic interventions and policy actions that promote safer behaviors, reduce biological and social vulnerabilities to transmission, encourage use of key prevention technologies, and promote social norms that favor risk reduction.

HIV prevention includes addressing an array of issues discussed in other thematic areas in the policy section of the website. Forging links among HIV prevention with related programs and services such as sexual and reproductive health services and legal services for women, can also contribute to intensification of HIV prevention. Strong linkages as well as special efforts to reach those at higher risk and excluded from access to services will result in more relevant and cost-effective programs with greater impact.

## **Essential Policy Actions for HIV Prevention**

1. Ensure that human rights are promoted, protected and respected and that measures are taken to eliminate discrimination and combat stigma.
2. Build and maintain leadership from all sections of society, including governments, affected communities, nongovernmental organizations, faith-based organizations, the education sector, media, the private sector and trade unions.
3. Involve people living with HIV, in the design, implementation and evaluation of prevention strategies, addressing the distinct prevention needs.
4. Address cultural norms and beliefs, recognizing both the key role they may play in supporting prevention efforts and the potential they have to fuel HIV transmission.
5. Promote gender equality and address gender norms and relations to reduce the vulnerability of women and girls, involving men and boys in this effort.
6. Promote widespread knowledge and awareness of how HIV is transmitted and how infection can be averted.
7. Promote the links between HIV prevention and sexual and reproductive health.
8. Support the mobilization of community-based responses throughout the continuum of prevention, care and treatment.
9. Promote programs targeted at HIV prevention needs of key affected groups and populations.
10. Mobilizing and strengthening financial, and human and institutional capacity across all sectors, particularly in health and education.
11. Review and reform legal frameworks to remove barriers to effective, evidence based HIV prevention, combat stigma and discrimination and protect the rights of people living with HIV or vulnerable or at risk to HIV.
12. Ensure that sufficient investments are made in the research and development of, and advocacy for, new prevention technologies.

Effective HIV prevention programming focuses on the critical relationships between the epidemiology of HIV infection, the risk factors that are known to be associated with the transmission of HIV and the structural and social factor, such as gender inequality and human rights violations, that drive the epidemic and impede peoples' abilities to access and use HIV information and services, making them vulnerable to HIV infection. HIV prevention is for life and must be sustained so that cumulative efforts address the HIV prevention needs of new cohorts of populations that may be vulnerable to HIV infection.

Sex workers, men who have sex with men, injecting drug users, and prisoners, tend to have a higher prevalence of HIV infection than that of the general population, because (i) they engage in behaviors that put them at higher risk of becoming infected and (ii) they are among the most marginalized and discriminated against populations in society.

In countries with low-level and concentrated epidemics, well-designed and adequately funded HIV prevention programs among these populations have proven decisive in slowing or even stopping the epidemic in its tracks. Countries with generalized epidemics that place a high priority on HIV programming for these populations, guided by epidemiological surveillance, will ensure the most effective use of resources.

Many other populations are also vulnerable to HIV and their HIV prevention needs should also be addressed. These key populations include:

- ✓ Children and Orphans
- ✓ Indigenous People
- ✓ People who inject drugs
- ✓ Men who have sex with men
- ✓ Migrants and mobile workers
- ✓ Peacekeepers
- ✓ People in the Health sector
- ✓ People in Prison settings
- ✓ Refugees and internally displaced people
- ✓ Sex workers and their clients
- ✓ Women and girls
- ✓ Young People

#### ➤ According to Medical Research:

##### To keep from getting HIV:

- Use latex condoms. **Proper, consistent use of a latex condom can prevent transmission of HIV 80 to 95% of the time.** Condoms can also help reduce the risk of acquiring some other STDs.
- Use plastic wrap or dental dams to help prevent HIV-infection during oral and oral-anal sex.
- Use clean needles: if you do use injectable drugs, use a new, clean needle every time.
- Have sober sex. Drug and alcohol-free sex increases your chances of having safer sex.
- Learn more. The more you know about safe sex, your body, condom use, HIV/AIDS and your partner, the better you can protect yourself against sexually transmitted diseases.
- **Fewer partners, monogamy and abstinence.** The fewer sex partners you have, the more you reduce your risk of HIV infection. While sex is a healthy, natural part of life, you may want to wait to have sex until you know the person you are with is someone you truly care about and has your best interest in mind. If they're not willing to wait, then maybe they weren't worth the wait. Trust yourself and what you need. It's your life and your health. Protect it.

#### ➤ According to Medical Research:

##### Proper, consistent use of a condom:

- Prevents transmission of **HIV** by 80-95%
- Prevents transmission of **HPV** by 70%
- Reduces the risk of **gonorrhea** in men by 70%
- Consistent use prevents the spread of HIV
- Reduces the risk of **syphilis**
- Reduces the risk of sexually transmitted infection during oral sex
- Reduces the risk of HPV, **herpes, Chlamydia, and pelvic inflammatory disease.**

#### ➤ Prevention:

##### ➤ Female Condoms:

Although shown to be effective in prevention of pregnancy and acceptable to users, the female condom has not achieved its full potential in national programs because of its relatively high cost. A new version of the Reality® female condom is made of synthetic nitrile, which makes it considerably less expensive. The new device has the potential for wider acceptability and utilization.

It is hoped that, if high utilization rates of the new device can be achieved, it will make a substantial contribution to prevention of unwanted pregnancy and sexually transmitted infections (STI), including HIV.

In addition to the new female condom, trials are also under way to test the effectiveness of diaphragms and other methods of protecting the cervix for HIV and STI prevention.

➤ **Male Circumcision:**

Male circumcision is one of the oldest and most common surgical procedures known. It is undertaken for cultural, religious, social as well as medical reasons.

The evidence that adult male circumcision is effective in reducing sexual transmission of HIV from women to men is compelling.

Male circumcision should always be considered as part of a comprehensive HIV prevention package. Moreover, wherever male circumcision services are offered, training and certification of providers, as well as careful monitoring and evaluation of programs, will be necessary to ensure that these meet their objectives and that quality services are provided safely, with adequate equipment and with appropriate counseling and other services.

➤ **New Prevention Technologies:**

New technologies, such as HIV preventive vaccines and microbicides, offer hope for sustained control of the HIV epidemic, particularly in the world's most vulnerable and marginalized populations.

Given the obstacles many women encounter when trying to negotiate the use of male condoms, there is an urgent need for more prevention options they can initiate themselves.

It is crucial to ensure that men and women will have access to new prevention technologies once they have been tested and proven safe and effective. To assure such access and prepare for the introduction of such technologies, issues related to financing, intellectual property right, manufacturing, procurement, logistics, delivery and provider and consumer education must be addressed. Once available, new prevention technologies will be additional prevention methods within comprehensive HIV prevention programming, but will not replace other effective means of reducing the risk of HIV infection.

Ensuring availability of safe and effective vaccines and microbicides will also demand appropriate regulatory approval and licensing infrastructure, manufacturing capacity and reasonably reliable in-country delivery networks. Even when these are in place, ensuring adoption will require end-user awareness about preventive products, effective pricing and financing mechanisms to ensure affordability, and a supportive social and policy environment.

➤ **Prevention of Mother to child:**

Prevention of HIV transmission from mother to her baby while in the womb or during birth or infant feeding requires a comprehensive package of services that includes preventing primary HIV infection in women, preventing unintended pregnancies in women living with HIV, preventing transmission from pregnant women living with HIV to their infants, and providing care, treatment and support for women living with HIV and their families.

Health systems need to be strengthened so that interventions to prevent mother to child transmission of HIV infection, including the use of antiretroviral drugs, can be safely and effectively implemented. Moreover, HIV testing in pregnancy has a number of benefits in terms of prevention and care for mother and child, although to avoid or minimize negative consequences testing must be voluntary and confidential and accompanied by quality counseling.

Timely administration of antiretroviral drugs to the HIV-diagnosed pregnant woman and her newborn significantly reduces the risk of mother-to-child HIV transmission. Positive mothers should also be provided with access to ART for the protection of their own health.

Combination regimes appear to be most effective but were until recently regarded as too costly for widespread use in low- and middle-income countries. In recent years, projects to prevent mother-to-child transmission in resource-limited settings have primarily focused on provision of single-dose intrapartum and neonatal nevirapine, which cuts the risk of HIV transmission by more than 40%. While the benefits of single-dose nevirapine outweigh the risk of resistance in these settings, development of affordable regimens with superior resistance profiles is an urgent global

priority.

### **(e) Attitudes towards HIV and AIDS**

#### **➤ Behavior:**

Unlike some infectious diseases, transmission of HIV is mediated directly by human behavior, so changing behaviors that enable HIV transmission is the ultimate goal or outcome required for HIV prevention.

Sexual behavior, which remains the primary target of HIV prevention efforts worldwide, is widely diverse and deeply embedded in individual desires, social and cultural relationships, and environmental and economic processes. So too are the behaviors related to transmission through injecting drug use and from mother to child. This makes HIV prevention a complex task with multiple dimensions, that requires both policy and programmatic actions.

In the context of HIV, risk is defined as the probability that a person may acquire HIV infection. Certain behaviors create, enhance and perpetuate such risk.

Risk arises from individuals engaging in risk behaviors for a variety of reasons such as lack of information, inability to negotiate safer sex, unavailability of condoms, etc. Over the recent years, the approach to HIV has broadened to not only focus on individual risks but also on the environmental and social factors that influence such behavior, and the key role that power relationships and gender inequalities play in influencing risk (UNAIDS, 1998).

Despite recent evidence in expansion of access to prevention, treatment, care and support services, the fundamental role of human behavior in the continued spread of HIV is increasingly clear. Fostering health enhancing behavior change outcomes demands a persistent commitment to meeting the diverse and changing needs of individuals, and to addressing the characteristics of their social, cultural and physical environments that place them at risk.

#### **➤ Communication for behavior change**

- ➔ Information, Education and Communication – sometimes called IEC - are a critical part of the puzzle for achieving the goal of universal access to HIV prevention, treatment, care and support. However, information, education and communications must be combined with other interventions to succeed.
- ➔ Methods of communication range from one-to-one personal interactions to posters placed in school classrooms to prevention messages on national television. The focus may range from reducing stigma or decreasing HIV infection, but the ultimate goal is behavior change.
- ➔ National programs must identify the array of behavior change needs and communication strategies throughout the country. Resources can then be devoted to development of programming specific to each cultural or behavioral group at high risk of HIV infection.
- ➔ Whatever the local epidemiological and social conditions, effective HIV prevention programs prioritize and focus on the intervention needs of people most at risk of exposure to HIV and likely to engage in HIV risk behaviors, and they focus program efforts on reaching adequate numbers of these key audiences with good quality services. These audiences should be segmented, and information and services should be tailored to meet each subpopulation's needs.
- ➔ Segmenting in this sense means identifying subpopulations within each key audience that are different enough to require different approaches or messages (for example, distinguishing transgendered persons from men who have sex with men, or street-based from brothel-based sex workers). It does not mean singling out those populations for blame or persecution, or stigmatizing an HIV prevention measure as only for specified people. Effective HIV prevention includes efforts to ensure that segmenting the response does not lead to stigmatization and other unintended adverse consequences.

#### **➤ On a Personal Level:**

You don't necessarily have to tell someone your HIV status right away. You may want to see how a relationship unfolds. The closer a relationship gets and the more time that passes, the harder it can be to talk about it sometimes.

Whatever happens, accept the reaction. You can't control how others deal with the news. Their reaction isn't a reflection on you – it's a reflection of them.

You don't have to tell everyone. You can take time to think about what you want. As you consider telling others about your status, **you might want to think about:**

- Why do you want to tell them? Are you looking for something from them?
- **How can you tell them that might make it easier?** Would having articles, websites or hotlines to leave with the person you're telling be helpful to them?
- **How might they react to the news?** What would be the best scenario? The worst? **People can have a wide range of reactions to news like this.**
- How much do you want to tell them? Some people may ask how you came to be infected with HIV. It's up to you to decide how much you want to say.
- Getting support from others who have had to face similar situations.

➤ **On a Professional Level:**

One particularly tricky consideration is whether to tell an employer about your health status. **The Americans with Disabilities Act (ADA) protects people with disabilities from job discrimination. As long as you can do the essential functions of your job, your employer can't legally discriminate against you because of your HIV status.**

If your illness or treatment interferes with your job, you may want to tell your employer. Get a letter from your doctor explaining what you need to do for your health. Talk to your boss or personnel director. Assure them that you want to continue working and what changes may be needed in your schedule or workload to do so. Make sure that they understand that you want to keep your HIV status confidential.

**(f) Appropriate behavior in dealing with persons who may have the virus or syndrome**

➤ **Care & Support:**

People living with HIV have a wide range of care and support needs. These include psychosocial support as well as treatment for 'opportunistic infections' (the illnesses to which they become vulnerable as the immune system is destroyed by the virus). When their HIV infection reaches the stage that it becomes life-threatening, they require treatment with antiretroviral drugs. However, the vast majority of people around the world do not yet have access to such services. Reaching out to them is a global priority.

AIDS-related care and support are key elements in the response to the epidemic: not only do they directly benefit people living with HIV, but they help also to reduce the social and economic impact of the epidemic and to boost HIV prevention.

Community care and support groups have sprung up almost everywhere in the world where the AIDS epidemic has appeared, and have shown amazing creativity and steadfastness in providing comfort and hope to people living with, or affected by, HIV.

The great majority of people with AIDS in low and middle-income countries are cared for at home, since health services are beyond the reach of large proportions of the population or are struggling to cope with the burden of the

virus.

Home- and community-based care takes many forms, but typically it is provided by relatives, friends, or community volunteers working for non-governmental organizations and supported to a greater or lesser extent by health professionals, mainly nurses.

#### ➤ **Monitoring & Evaluating:**

UNAIDS harmonizes monitoring and evaluation approaches at global, regional and country levels to generate reliable and timely information on the epidemic and the response.

#### **The Country Response Information System (CRIS)**

CRIS is an information system for monitoring and evaluating national responses to AIDS. It includes integrated indicator, project/resource tracking, and research modules. It facilitates the development of a clearinghouse for indicator data to enable indicator exchange between UN and other partner applications..

#### ➤ **Stigma & Discrimination:**

Because of its association with behaviors that may be considered socially unacceptable by many people, HIV infection is widely stigmatized.

People living with the virus are frequently subject to discrimination and human rights abuses: many have been thrown out of jobs and homes, rejected by family and friends, and some have even been killed.

Together, stigma and discrimination constitute one of the greatest barriers to dealing effectively with the epidemic. They discourage governments from acknowledging or taking timely action against AIDS. They deter individuals from finding out about their HIV status. And they inhibit those who know they are infected from sharing their diagnosis and taking action to protect others and from seeking treatment and care for themselves.

➤ Workplace attitudes toward people living with HIV/AIDS, and acceptance of condom use and other preventive measures have increased in some countries as a result of HIV policies and practices, according to a report by the **International Labor Organization**, the U.N. News Service reports (*U.N. News Service*, 4/15). The report, titled "Saving Lives, Protecting Jobs," was prepared by the ILO Program on HIV/AIDS in the World of Work and presented to the U.S. Department of Labor, which is the funding partner in the Strategic HIV/AIDS Responses in Enterprises, or SHARE, project, Occupational Health Safety reports.

➤ **The report tracked changes in attitudes related to HIV/AIDS and looked at data collected from the ministries of labor, and employers and employees from workplaces** in six SHARE pilot countries, including Belize, Benin, Cambodia, Ghana, Guyana and Togo. According to the report, in all six countries, the proportion of workers who reported supportive attitudes toward co-workers living with HIV/AIDS increased on average from 49% in 2003 to 63% (*Occupational Health Safety*, 4/15). Attitudes toward condom use also improved in the six countries.

The percentage of workers who reported using condoms with nonregular partners increased from 74% in 2003 to 84%, the report found. The recorded changes in behavior could be attributed partly to the increased access to HIV services in the workplaces in all six countries, the report noted (*U.N. News Service*, 4/15). According to an ILO release, the report also found that in 2003 when SHARE started, only 14% of the participating workplaces in the six pilot countries had codified HIV policies. The report found that 76% of the participating enterprises now have written policies.

**Saving lives, protecting jobs: new horizons in the fight against HIV/AIDS at work**

HIV is having a devastating effect on the world of work. The majority of the 33.2 million people worldwide living with HIV/AIDS are working and have skills and experience their families, workplace and countries can ill afford to lose. As the UN's lead agency in HIV/AIDS workplace interventions, the ILO is launching a new report highlighting strategic responses to HIV/AIDS in enterprises worldwide. ILO Online spoke with Dr Sophia Kisting, Director of the ILO/AIDS.

✓ The workplace offers distinct opportunities and advantages as a key delivery point for HIV prevention, treatment and care programs on an on-going basis. Using a combination of dialog, training and facilitation methods, the **SHARE** program aims to increase the capacity of government, employers' and workers' organizations in participating countries to protect working people from HIV and help to reduce its impact on the world of work. The main thrust of the SHARE program is action at the enterprise level.

**The program financed by the United States Department of Labor** is now reaching more than a million workers.

● **Is changing attitudes and behavior key to successful workplace interventions?**

Behavior change programs are an essential and central element in enterprise-level initiatives within SHARE. Many workers do not know enough about HIV to protect themselves, while others do know but still don't change their behavior to reduce the risk of infection.

Behavior change is a form of participatory education that encourages people to understand their own attitudes to HIV, assess their own risks, and motivate them to change behavior. The program uses targeted messages and approaches and is implemented through a system of peer education. This is based on the idea that individuals are most likely to change their behavior through the support of people they know and trust. **Positive individual behavior change in turn encourages and motivates more collective behavior change.**

**Various Out Reach Programs**

- Out of the Closet
- Men's Wellness Center
- West Hollywood Mobile Testing Unit
- Magic Johnson Mobile Testing Van
- Jails Testing Program
- Partner Counseling and Referral Services
- Social Marketing
- Outreach and Education
- Oakland
- InSpot