HIV/AIDS

The Essential Facts
Educating the Church About HIV/AIDS

awareness
“Over the past decade, limited attention has been paid to the human immunodeficiency virus (HIV) epidemic in the United States.”

New England Journal of Medicine, pg 967
March 18, 2010
“In the United States, the HIV/AIDS epidemic is a health crisis for African Americans. At all stages of HIV/AIDS—from infection with HIV to death with AIDS—blacks (including African Americans) are disproportionately affected compared with members of other races and ethnicities.”

CDC
Understanding The HIV Infection...
HIV and AIDS

- **HIV** (the human immunodeficiency virus) causes infection and eventually **AIDS** (the acquired immunodeficiency syndrome)
- The HIV infection gradually destroys the immune system, which makes it harder to ward off infections and some cancers
Types of HIV Infection

- There are two types of the HIV virus: HIV-1 and HIV-2
- Worldwide most prevalent is HIV-1
- HIV-2 is concentrated in West Africa
- HIV-2 less easily transmitted and the period between initial infection and illness is longer
- Not all drugs used for HIV-1 effective for HIV-2, therefore treatment is somewhat different
How Is HIV Spread?

- Sexual Activity (oral, anal, vaginal)
- Through the transfer of blood into another person as in sharing needles
- Transfusion of infected blood or blood products (low risk in US)
- Mothers can transmit to babies before birth, during birth and with breast feeding
- Infected tissue transplants
What Can Spread the Infection?

**Four Body Fluids:**
- Blood
- Semen
- Vaginal Fluid
- Breast Milk (rare in U.S.)

**HIV can be detected in:**
- Tears
- Urine
- Saliva
- Cerebrospinal Fluid
- Alveolar Fluid

*The amount in these is thought to be too low to transmit the virus. The virus must enter the blood stream*
Sharing needles also includes...

- Body Piercing
- Tattooing
- Skin Popping
- Injecting Steroids
- Sharing Razors
- Sharing Toothbrushes
Those At Highest Risk of Infection...

- Sharing needles
- Having unprotected vaginal, anal or oral sex with multiple partners or anonymous partners
- Working as a sex worker or exchanging sex for money or drugs
- Having an STD such as syphilis, which can increase risk for HIV transmission
- Having received a blood transfusion before 1985
- Having unprotected sex with anyone who has any of the above risks
HIV Infection By Age Group

![Bar chart showing the number of HIV diagnoses by age group.](image)

- Under 13: 166
- 13-14: 21
- 15-19: 6,237
- 20-24: 5,951
- 25-29: 5,020
- 30-34: 5,232
- 35-39: 5,519
- 40-44: 4,865
- 45-49: 3,323
- 50-54: 2,004
- 55-59: 900
- 60-64: 736

CDC
There is a connection between HIV and other STD's.

If a person has another STD (such as syphilis, gonorrhea, or herpes), that person is three to five times more likely to pass HIV to someone else.

It is important to be tested for other STD's when being tested for HIV.
How Is HIV NOT Spread?

- Shaking hands
- Casual kissing
- Everyday contact at school, work or in social settings
- Insects
- Touching a doorknob
- From pets
- Swimming pools
- From food and utensils
- **Note: the virus does not live long outside the body**
Symptoms of Acute HIV Infection

- Diarrhea, Fatigue, Fever
- Frequent vaginal yeast infections
- Headache
- Mouth sores
- Muscular stiffness or aching
- Sore throat
- Swollen lymph glands
- NO SYMPTOMS
- People with HIV may have no symptoms for up to 10 years
Symptoms of AIDS

- Cancer such as lymphoma, Kaposi's sarcoma
- Chronic wasting with weight loss
- HIV dementia with mental changes such as memory loss, personality changes
- Pneumonia such as that due to *Pneumocystis carinii*
- Tuberculosis
- Numerous other types of infections
- These symptoms are more severe than those due to early HIV infection
Awareness of Serostatus Among People with HIV and Estimates of Transmission

- ~25% Unaware of Infection
- ~75% Aware of Infection

People Living with HIV/AIDS: 1,039,000 - 1,185,000

New Sexual Infections Each Year: ~32,000

Accounting for:

- ~54% of New Infections
- ~46% of New Infections

Marks, et al. AIDS 2006;20:1447-50
An HIV/AIDS Timeline...
1981: Official start of HIV/AIDS epidemic. Reports made by CDC of unusual pneumonia, Kaposi’s sarcoma (a rare skin cancer) in gay males


1983: Virus isolated in France later to be known as HIV. (first called-LAV or lymphadenopathy-associated virus)

1984: Robert Gallo of US identifies HIV as cause of AIDS

1985: First international AIDS conference in Atlanta. Ryan White, a teenager in Indiana barred from school. First HIV antibody test approved by FDA. Blood banks begin testing

1986: President Reagan mentions AIDS in public. First drug AZT entered in clinical trials

1987: First antiretroviral drug AZT approved
1988: World AIDS Day first declared by WHO for Dec. 1

1990: Sixth International AIDS Conference in San Francisco. Ryan White dies at age 18. Congress enacts Ryan White act to federally fund community based care and treatment services for those infected with HIV

1992: 8th International AIDS Conference in Amsterdam. Teenager Ricky Ray-whose home was burned because he and siblings were HIV positive dies

1994: US Public Health Service advises use of AZT to prevent maternal transmission of HIV with 70% reduction in transmission noted

1995: First protease inhibitor Saquinavir introduced beginning era of HAART (highly active antiretroviral therapy) for treatment of AIDS

1996: 11th International AIDS Conference highlights effectiveness of HAART. FDA approves viral load test to measure HIV level in the body. The drug nevirapine was approved for treatment of AIDS. HIV no longer leading cause of death for all Americans age 25-44, but remains so for African Americans

1997: AIDS related deaths decline by more than 40% compared to prior year due to HAART
1998: Minority AIDS Initiative created. African American leaders declare a “state of emergency”

2000: 13th International AIDS Conference in Durban South Africa—first such conference in developing nation. CDC reports that among men having sex with men Latinos and African American surpass cases in whites

2002: 14th International AIDS Conference in Barcelona, Spain. FDA approves OraQuick rapid HIV test done by finger stick with results in 10 minutes

2004: 15th International AIDS Conference in Bangkok, Thailand. OraQuick HIV test for use with oral fluid approved

2006: 25th year since first AIDS cases reported

2007: WHO advised circumcision as part of prevention regimens

2008: WHO, UNAIDS, UNICEF issue report that HAART treatment had increased 7 fold over 4 years with 3 million people treated in low and middle income nations
2009: A medical trial in Thailand has raised hopes of a major breakthrough in the fight against Aids after scientists said an experimental vaccine had reduced the risk of HIV infection by a third.

2010: “National HIV/AIDS Strategy for the United States” was published by the Whitehouse

2011: 30 years of the AIDS pandemic noted
Facts and Figures: A Look at Statistics

• Global
• Caribbean
• United States
Global
The number of people living with HIV rose from around 8 million in 1990 to 33 million by the end of 2009. The overall growth of the epidemic has stabilized in recent years. The annual number of new HIV infections has steadily declined and due to the significant increase in people receiving antiretroviral therapy, the number of AIDS-related deaths has also declined.

Since the beginning of the epidemic, nearly 30 million people have died from AIDS-related causes.
Sub-Saharan Africa is more heavily affected by HIV and AIDS than any other region of the world. An estimated 22.9 million people are living with HIV in the region - around two thirds of the global total.
Caribbean
The HIV/AIDS Epidemic in the Caribbean

• With a prevalence rate of 1% is the second most affected region in the world after Sub-Saharan Africa
• National HIV burden varies from low of 0.1% in Cuba to 3% in the Bahamas
• In this region there is a need for robust intervention
## The HIV/AIDS Epidemic in the Caribbean

<table>
<thead>
<tr>
<th>Country</th>
<th>Living with HIV/AIDS</th>
<th>Adult Prevalence</th>
<th>Deaths due to AIDS in 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahamas</td>
<td>6,200</td>
<td>3%</td>
<td>&lt;200</td>
</tr>
<tr>
<td>Barbados</td>
<td>2,200</td>
<td>1.2%</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Cuba</td>
<td>6,200</td>
<td>0.1%</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>62,000</td>
<td>1.1%</td>
<td>3,900</td>
</tr>
<tr>
<td>Haiti</td>
<td>120,000</td>
<td>2.2%</td>
<td>7,500</td>
</tr>
<tr>
<td>Jamaica</td>
<td>27,000</td>
<td>1.6%</td>
<td>1,400</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>14,000</td>
<td>1.5%</td>
<td>&lt;1,000</td>
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HIV/AIDS In America
Transmission Categories

![Bar chart showing the number of new HIV infections by transmission category.](image)
The CDC estimates 1.2 million people in the US are living with HIV infection
20% of infected people are not aware of their infection
Men who have sex with men (MSM)-especially young black men- are most severely infected
By race, African Americans face the most severe HIV burden

CDC, Nov. 2011
“Blacks represent approximately 14% of the US population, but accounted for an estimated 44% of new HIV infections in 2009.”
Children < 13 diagnosed with AIDS in 2005

No. = 68

African American 46
Hispanic 13
White 6
Asian/Pacific Islander 1
Other/Race unknown 2

CDC
Black Heterosexuals with New infections-2006

Total Persons: 10,630

CDC
Persons Diagnosed with HIV/AIDS-2005

- Black: 49%
- White: 31%
- Hispanic: 18%
- Asian/Pacific Islander: 1%
- American Indian/Alaska Native: <1%

No. = 37,331

CDC
Prevalence is the total number of cases in the population divided by the number of individuals in the population.

HIV Prevalence for Selected Countries

Prevalence %

<table>
<thead>
<tr>
<th>Country</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington DC</td>
<td>3.0</td>
</tr>
<tr>
<td>Senegal</td>
<td>0.5</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>1.0</td>
</tr>
<tr>
<td>Rwanda</td>
<td>3.5</td>
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</table>
Regional Distribution of HIV: Cities with Highest HIV Burden

HHS 12 CITIES PROJECT

SAN FRANCISCO
LOS ANGELES
DALLAS
HOUSTON
MIAMI
SAN JUAN, PUERTO RICO
NEW YORK CITY
PHILADELPHIA
Baltimore
WASHINGTON, D.C.
ATLANTA
SAN JUAN, PUERTO RICO

12 Cities Project
HIV/AIDS In Colorado
African Americans/Blacks have a higher rate of new case rates for HIV/AIDS which are the highest rates of any racial/ethnic group.

State

African American Population about 4% of total

Colorado HIV/AIDS Incidence Rates

- African American, 50.2
- All Coloradans, 12.8

CDPHE 2010
Colorado HIV Mortality 2002-2006

- Total: 1.9
- White: 1.5
- Hispanic: 2.7
- Black: 7
- Am Indian: 2.3

Age Adjusted rate per 100,000
Why the AIDS/HIV Crisis in the African American Community Nationwide?
### Some Key Factors

<table>
<thead>
<tr>
<th>Lack of Information</th>
<th>High risk sexual behavior</th>
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<tbody>
<tr>
<td>Misinformation</td>
<td>Substance abuse</td>
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<tr>
<td>Discrimination</td>
<td>Incarceration</td>
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<tr>
<td>Mistrust of medical profession</td>
<td>Stigmatization</td>
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<tr>
<td>Insurance issues: lack of insurance, underinsurance</td>
<td>Lack of awareness of HIV status</td>
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<tr>
<td>Poverty</td>
<td>Masking of homosexual behavior</td>
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<td>Shortage of primary care providers</td>
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The Value of “HAART” treatment (drugs to fight HIV infection)

- Can impact the length and quality of life
- May be started late if HIV positive status not known leading to poorer outcome
- Access may be an issue
- Lack of knowledge about medication, and side effects can be detrimental
- Six regimens of drugs available, people need to be informed

Dept. of Health and Human Services
A Call To Action for All of Us...
The Good News About HIV/AIDS:

Knowledge is Power!
“And Jesus went about all Galilee, teaching in their synagogues and preaching the gospel of the kingdom, and healing all manner of sickness and all manner of disease among the people.”

Matthew 4:23