



A Persistent Problem in America's Paradise: Examination of the HIV/AIDS Epidemic in the United States Virgin Islands

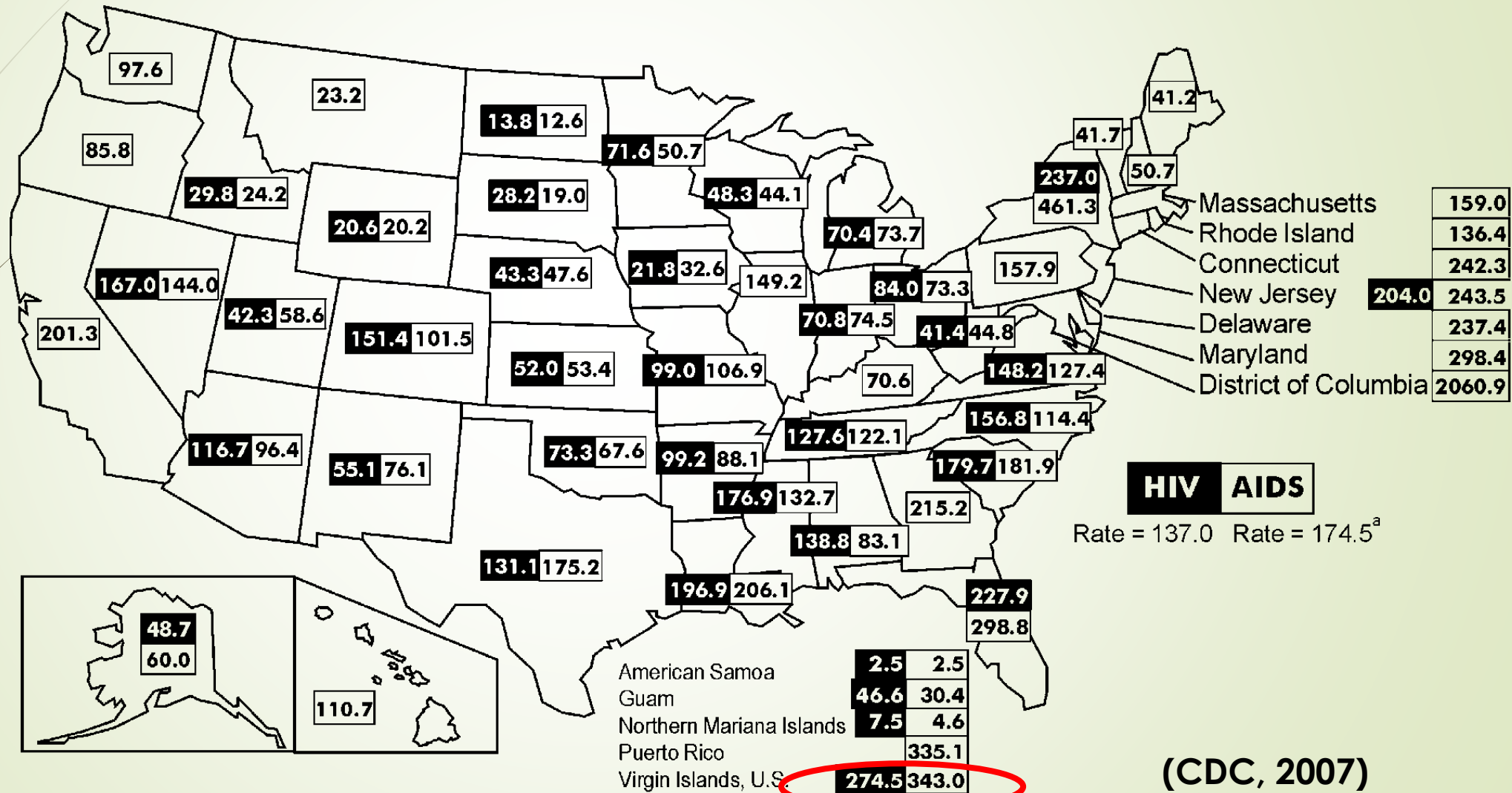
Safiya George Dalmida, PhD APRN-BC

University of Alabama

Capstone College of Nursing



Estimated rates (per capita) for adults & adolescents living with HIV infection or AIDS, 2005



(CDC, 2007)

HIV and AIDS in the USVI

- U.S. Virgin Islands (USVI) has had one of the top three highest prevalence rates of HIV infection in the US.

Table 1. USVI Annual Prevalence rates of HIV infection (not AIDS) for Adults & Adolescents

Year-End	Per Capita Rate	Rank in Nation	HIV Surveillance Report, Year	Citation
2005	274.5 †	1 st /Highest	HIV Surveillance Report, 2005	CDC, 2007
2006	258.8 †	2 nd highest	HIV Surveillance Report, 2006	CDC, 2008
2007	268.2 †	2 nd highest	HIV Surveillance Report, 2007	CDC, 2009
2007	641.3 ‡	2 nd highest	HIV Surveillance Report, 2008	CDC, 2010
2008	663.9 ‡	2 nd highest	HIV Surveillance Report, 2009	CDC, 2011
2009	632.7 ‡	2 nd highest	HIV Surveillance Report, 2010	CDC, 2012
2010	667.1 ‡	3 rd highest	HIV Surveillance Report, 2011	CDC, 2013
2011	685.1 ‡	3 rd highest	HIV Surveillance Report, 2012	CDC, 2014
2013	688.7 ‡	3 rd highest	HIV Surveillance Report, 2013	CDC, 2015

†Estimated rates (per 100,000 population) for persons living with HIV infection (not AIDS)

‡Adults and adolescents living with diagnosed HIV infection, regardless of stage of disease at diagnosis.

HIV and AIDS in the USVI

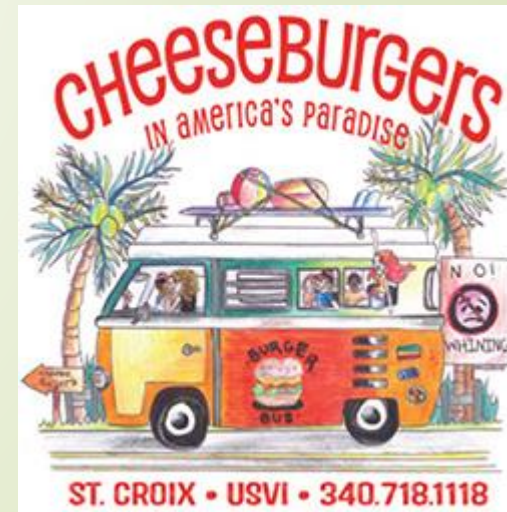
- USVI has had one of the top three highest AIDS prevalence rates in the US since 2005.

Table 2. USVI Annual Prevalence rates for Adults/Adolescents living with an AIDS Diagnosis

Year-End	Per Capita Rate	Rank in Nation	HIV Surveillance Report, Year	Citation
2005	343.0	2 nd Highest	HIV Surveillance Report, 2005	CDC, 2007
2006	355.0	2 nd highest	HIV Surveillance Report, 2006	CDC, 2008
2007	368.6	3 rd highest	HIV Surveillance Report, 2007	CDC, 2009
2007	353.7 ^{a, b}	4 th highest	HIV Surveillance Report, 2008	CDC, 2010
2008	356.4	4 th highest	HIV Surveillance Report, 2009	CDC, 2011
2009	355.0	4 th highest	HIV Surveillance Report, 2010	CDC, 2012
2010	383.4	3 rd highest	HIV Surveillance Report, 2011	CDC, 2013
2011	365.5	3 rd highest	HIV Surveillance Report, 2012	CDC, 2014

HIV and AIDS in the USVI

- USVI is a “geographic hot spot” for increased HIV risk
- 1061 cumulative cases of people living with HIV/AIDS (PLWHA), at end of 2013.
- AA/Black (56.9%) and Hispanic (33.7%); less than 10% where White (8.1%) (CDC, 2014)
- Females accounted for approximately 50% of cumulative HIV cases by end of 2010
(USVI DoH, 2010, 2012)
and 43% PLWHA in 2014 (USVI DoH, 2015)





Risk Categories in the USVI

- 35% Heterosexual transmission (most common)
- 19% Male-to-male sexual contact
- 7.6% Injection drug use
- 75.7% Age 25 to 54 years old.
- Key emerging HIV-positive populations in the USVI are immigrant groups from Haiti and Dominican Republic.

(USVI DoH, 2015)

Study Purpose & Methods

- The purpose of this analysis was to present findings that highlight a persistent HIV/AIDS epidemic in the U.S.V.I.
- **Methods:**
- Analyzed USVI HIV-related data from 2005 – 2010 from CDC Behavioral Risk Surveillance System (BRFSS)
 - 2009 and 2005 Annual Surveys
- Reviewed HIV surveillance data from the USVI Department of Health
 - 2008, 2010, 2012 and 2014 data





Data Analysis

➤ **Descriptive statistics**

- examined the socio-demographics of the population and frequency of HIV testing and HIV risk behavior for 2005 and 2009.

➤ **Chi square tests**

- examined associations between age, gender, race/ethnicity and high risk HIV behavior

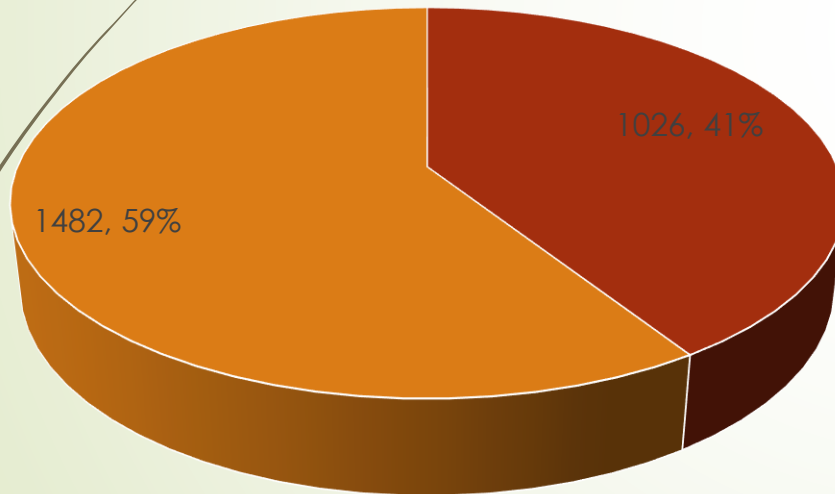
➤ **logistic regression**

- examined predictors of high risk HIV behavior, using 2005 data.

Sample Characteristics (N=2,509)

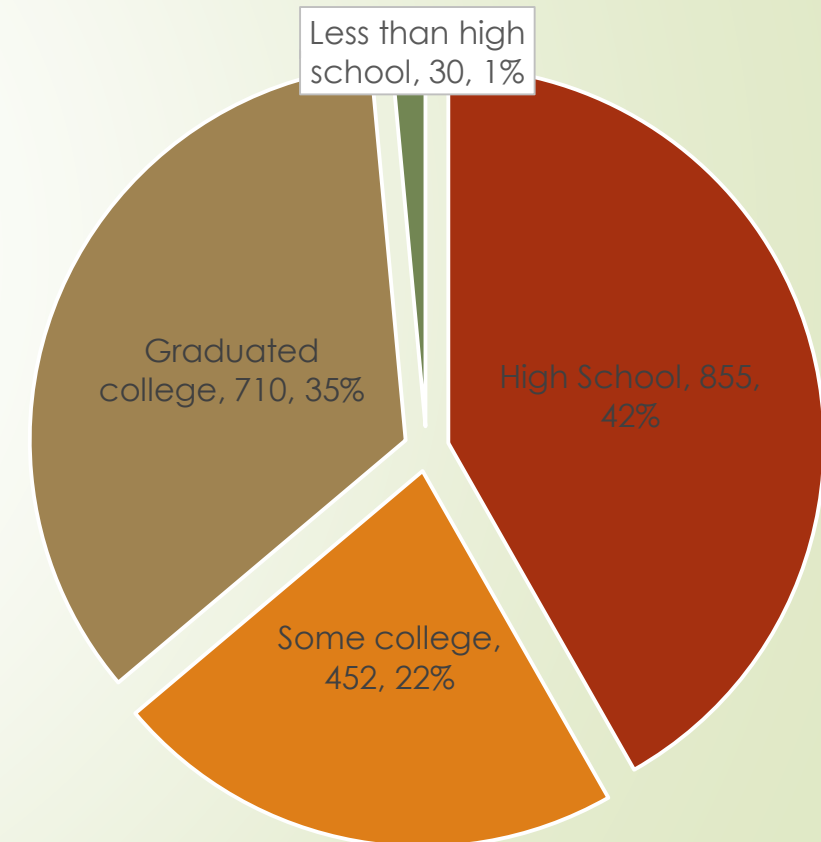
➤ N= 2,509 people surveyed in 2009 and 2,422 in 2005

Marital Status



■ Married ■ S/W/D

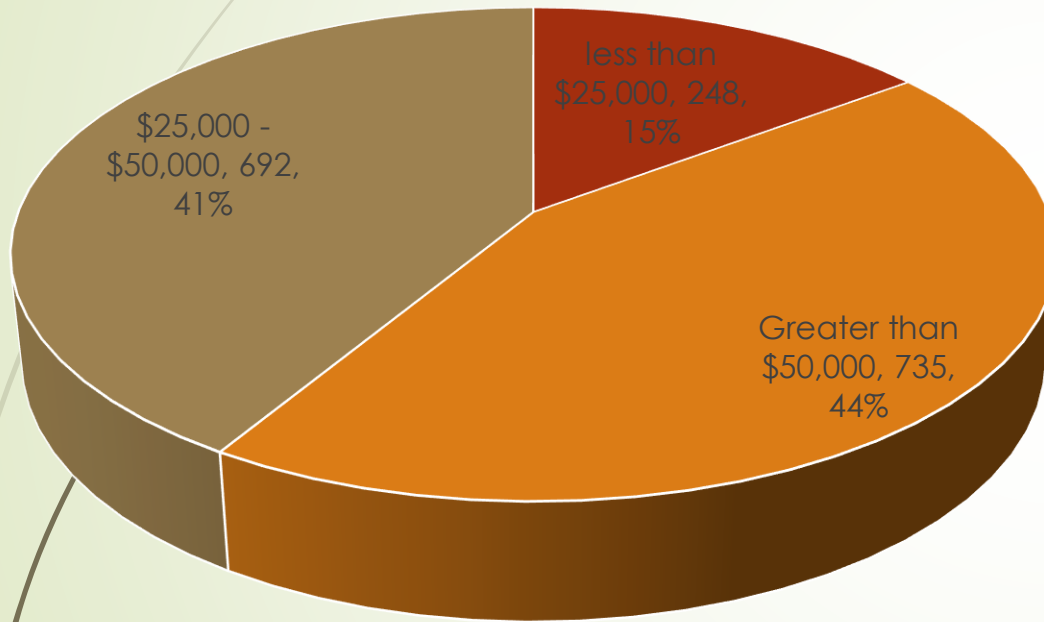
Education



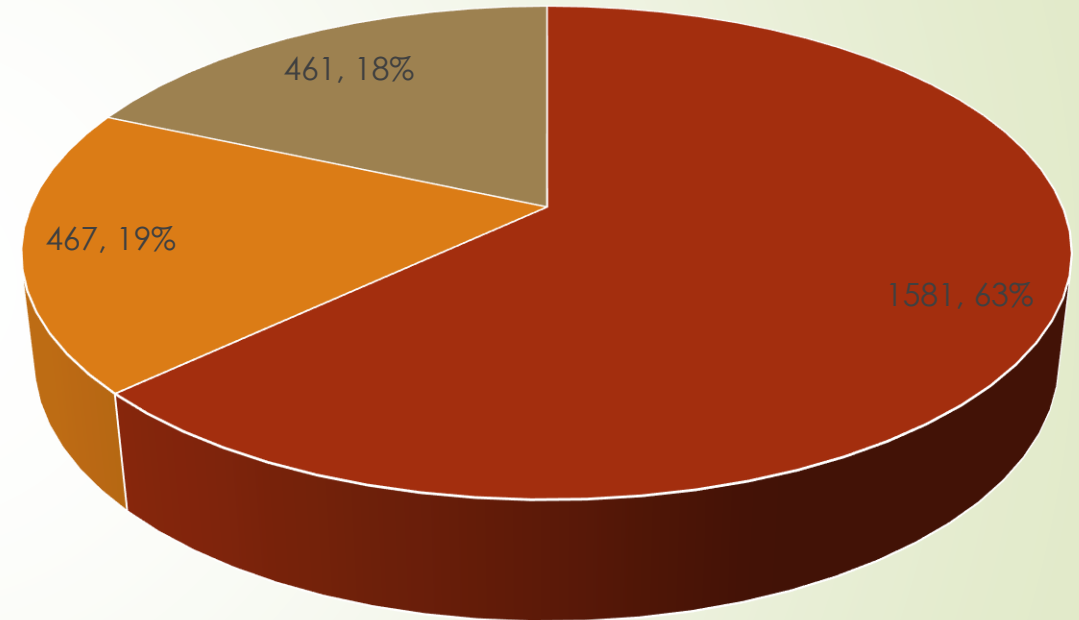
■ High School ■ Some college ■ Graduated college ■ Less than high school

Sample Characteristics (N=2,509)

Annual Income



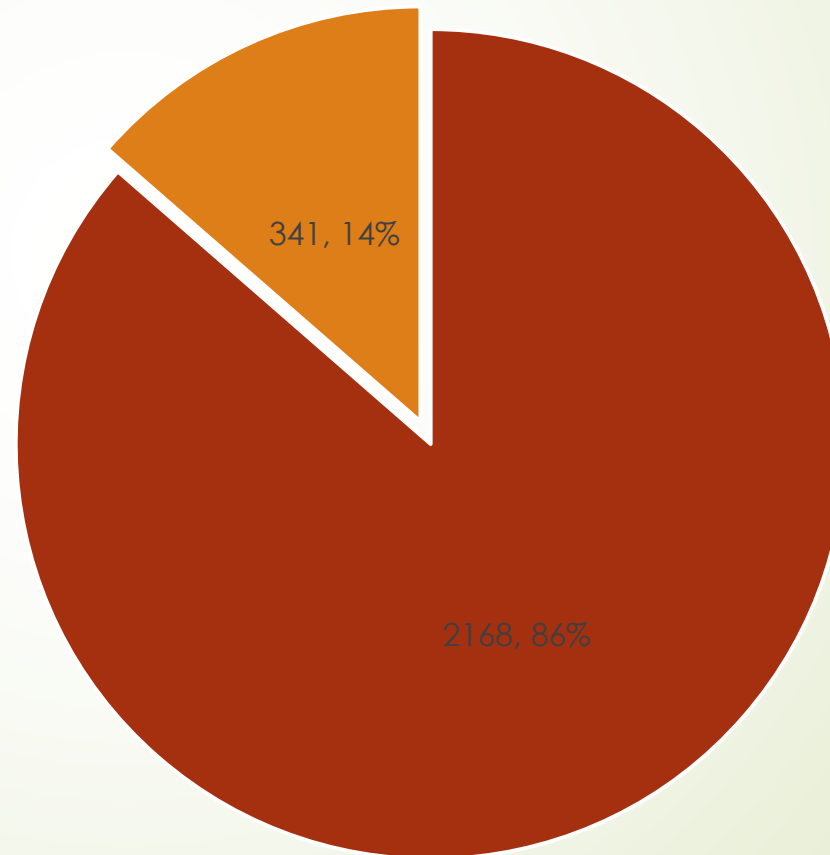
Employment



■ less than \$25,000 ■ Greater than \$50,000 ■ \$25,000 - \$50,000 ■ Employed/self-employed ■ Retired ■ Unemployed/disability

Sample Characteristics (N=2,509)

Race/Ethnicity



■ Black (non-Hispanic) ■ Non Black



HIV Testing & Risk

Question	2009	2005
Ever had an HIV test	60.6%, (n=1154)	53.6%, (n=1074)
Engaged in high HIV risk behavior	5.5% (n=105)	6.5% (n=130)

Risk Factors of High HIV Risk Behavior

- Age was significant predictor
 - (Chi square= 8.57, **p=.0002**)
- Among 18 - 24 year olds,
 - 19.7% reported high HIV risk (vs 13.5% not at risk) and
- Among 25 - 44 year olds,
 - 59.1% reported high HIV risk (vs 45.8% not at risk).
- Gender not significantly associated with high HIV risk behavior
 - (Chi square= 0.28, p=.597)

Predictors of High HIV Risk Behavior

- In a logistic regression model, accounting for race/ethnicity and gender,
- Age significantly predicted high risk for HIV

(Wald Chi square=631.48, df=4, p=**.0001**)

- Being 18 - 24 years ($t=2.83$, $p=$ **.0047**) significantly predicted high HIV risk
 - they were 2.5 times (CI 1.3 - 4.9) more likely to be at high risk for HIV
- Being 25 - 44 years ($t=3.49$, $p=$ **.0005**) old significantly predicted high HIV risk
 - they were 2.5 times (CI 1.3 - 4.9) more likely to be at high risk for HIV




Predictors of High HIV Risk Behavior

- A more comprehensive logistic regression model (education, gender, income, race/ethnicity and age) significantly predicted risk for HIV
 - (Wald Chi square=779.58, df=20, p=**.0001**)
- Age was the *only significant predictor* (t=2.9, p=**.0038**)
 - 25 – 44 years were 2.2 times more likely to have high risk for HIV (CI 1.3 - 3.6)

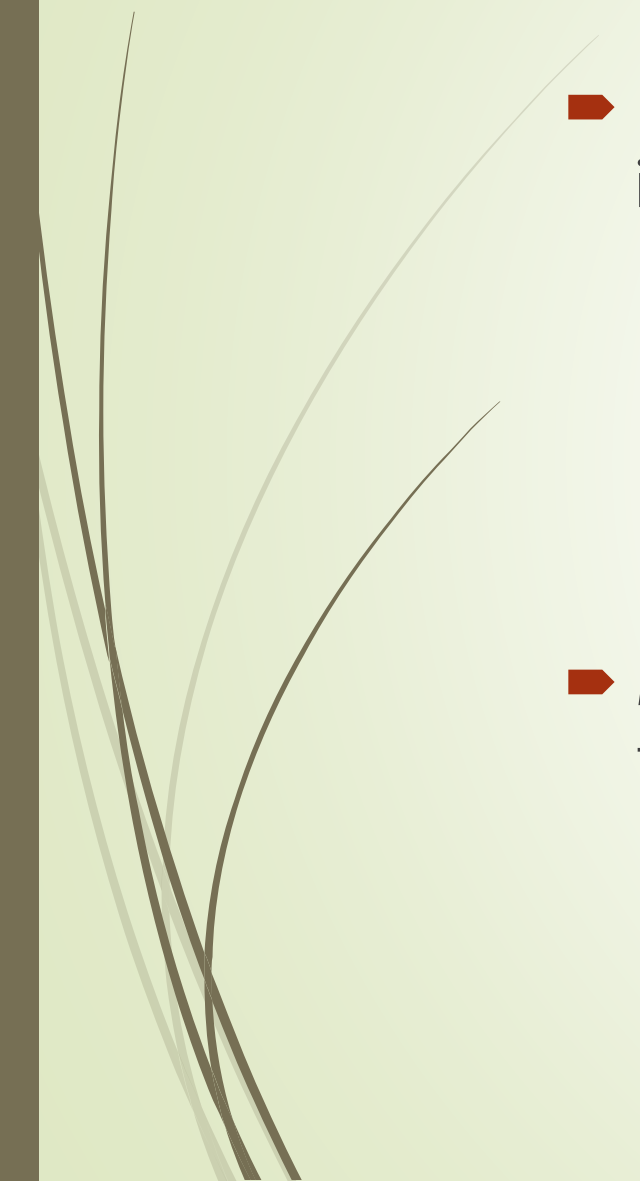


Conclusions

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- BRFSS results indicate an increase in reported history of HIV testing and a decrease in reported high HIV-associated risk behavior from 2005 to 2009
 - Being a young adult significantly (twice higher) increased the odds of being at high risk for HIV.



Conclusions

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- ▶ Local USVI data show that the HIV epidemic in the USVI is primarily among
 - ▶ African Americans,
 - ▶ heterosexual men and women
 - ▶ between the ages of 25 to 54 years old.
 - ▶ More targeted outreach and prevention needed in these population subgroups



Implications

- Expanded HIV testing efforts needed
- More studies needed to examine the HIV-associated sexual risk behaviors of
 - Adults/young adults in the USVI
 - Minorities
 - Men who have sex with men (MSM)
 - Other high risk groups
- Development of appropriate HIV prevention interventions needed for these populations.