

Examination of the HIV/AIDS Epidemic in the United States Virgin Islands: Community Needs Assessment & Gap Analysis

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Disclosure & Declaration Statement

The presenter(s) have no conflicts of interest to declare and have not received any commercial support for this project or presentation.

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Objectives

- Identify factors associated with HIV risk in the USVI
- Evaluate HIV testing practices and trends in the USVI
- Identify the practices and perspectives, educational and testing needs, and community resources for those living with or at risk for HIV/AIDS in the USVI.





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

AIDS, 2005 97.6 23.2 13.8 12.6 85.8 71.6 50.7 237.0 29.8 24.2 28.2 19.0 48.3 44.1 ≫ Massachusetts 159.0 461.3 20.6 20.2 70.4 73. Rhode Island 136.4 21.8 32.6 Connecticut 157.9 242.3 43.3 47.6 167.0 144.0 84.0 73.3 New Jersey 204.0 243.5 42.3 58.6 70.8 74.5 Delaware 201.3 41.4 44.8 237.4 151.4 101.5 Maryland 298.4 **52.0 53.4** 99.0 106.9 148.2 127.4 District of Columbia 2060.9 156.8 114.4 127.6<mark>122.1</mark> 73.3 67.6 99.2 88.1 116.7 96.4 179.7 181.9 55.1 76.1 AIDS HIV 176.9 132.7 215.2 Rate = 137.0 Rate = 174.5 138.8 83.1 131.1 1*7*5.2 196.9 206.1 227.9 298.8 American Samoa 30.4 110.7 Northern Mariana Islands 7.5 4.6 335.1 Puerto Rico (CDC, 2007) Virgin Islands, U.S 274.5 343.0



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 †	1st/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



AIDS in the USVI

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

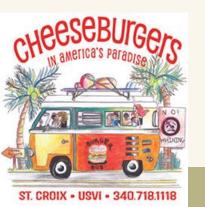
Table 2. USVI Annual Prevalence rates for Adults/Adolescents living with an AIDS Diagnosis

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 (NHAS, 2013)
- 1061 cumulative cases of people living with HIV/AIDS (PLWHA), at end of 2013 (CDC, 2014).
- 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)
- 43% PLWHA in 2014 (USVI DoH, 2015)





HIV in the US Virgin Islands



http://goingabroad.org/wp-content/uploads/2013/05/usvi-beach-feature.jpg



HIV in US Virgin Islands: Diagnostic Status (2014)

HIV

■ Diagnosed: 324 (30.5%)

■ Deaths: 52 (11.5%)

AIDS

■ Diagnosed: 737 (69.5%)

■ Deaths: 400 (88.5%)





Persons living with an HIV/AIDS diagnosis – 2014

HIV: 271 people, 44.6%

AIDS: 337 people, 55.4%

■ Black: 60%

Hispanic: 31.1%

White: 7.9%

Other: 1%





USVI Risk/Transmission Categories

- 35% Heterosexual transmission (most common)
- 19% Male-to-male sexual contact
- 7.6% Injection drug use
- 75.7% Age 25 to 54 years old
- MSM and IDU: 2.1%
- Perinatal: 1.5%
- Blood transfusion/hemophiliac: 0.2%
- 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

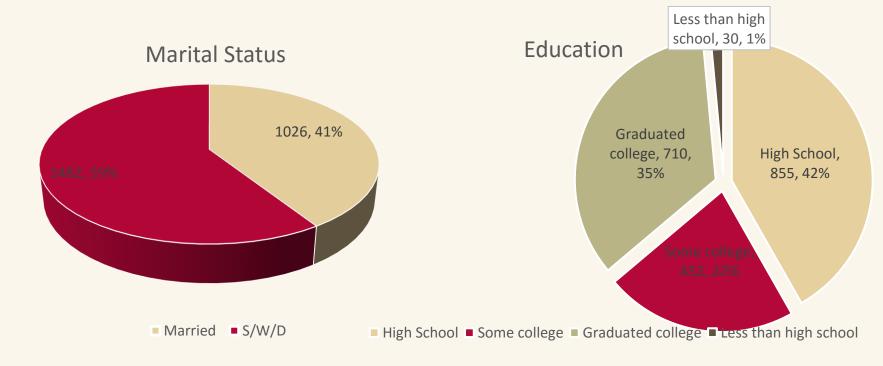
logistic regression

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



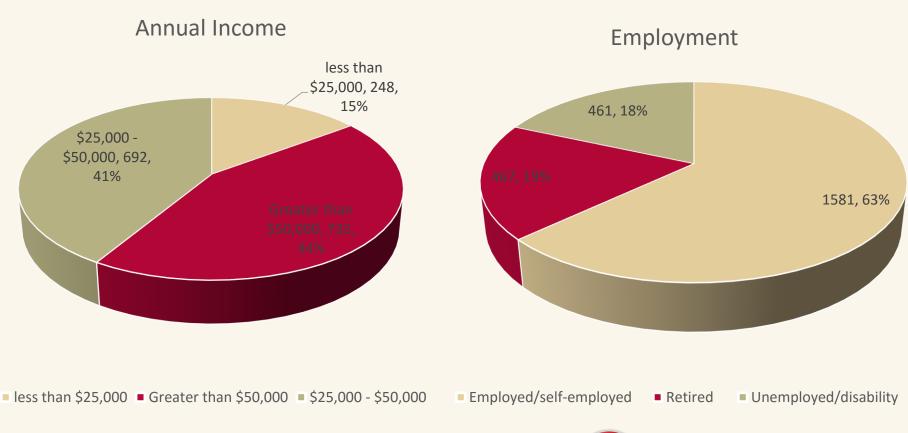
Sample Characteristics (N=2,509)

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





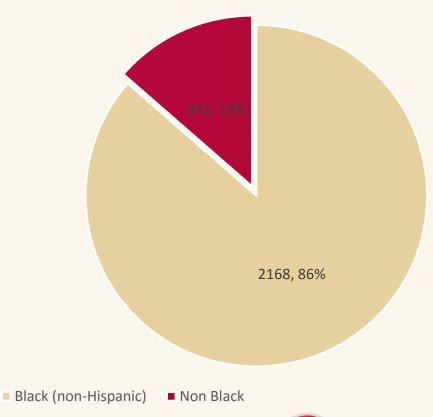
Sample Characteristics (N=2,509)





Sample Characteristics (N=2,509)

Race/Ethnicity





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: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 (Cl 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 (Cl 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)



BRFSS Analysis Conclusions

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.



U.S. VIRGIN ISLANDS HIV PROJECT



Principal Investigator: Safiya George Dalmida, PhD

Co-Investigators: Tai Hunte-Cesar, MD and Gritell Martinez, PhD USVI Department of Health, Communicable Diseases Division

Funded by the Emory University Global Health Institute

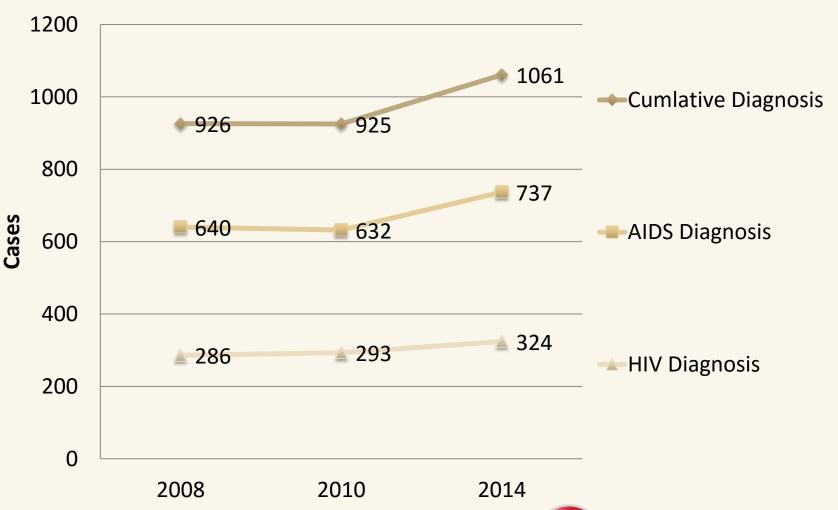


Purpose

- Conduct a community needs assessment to identify key HIV-specific concerns and expressed needs related to HIV/STIs
- Conduct a gap analysis that identifies where there is a lack of knowledge, prevention practices, confidentiality, and testing
- Map local community HIV-related educational and testing needs and community resources
- Evaluate progress made on USVI Comprehensive HIV/AIDS Prevention Plan testing goals

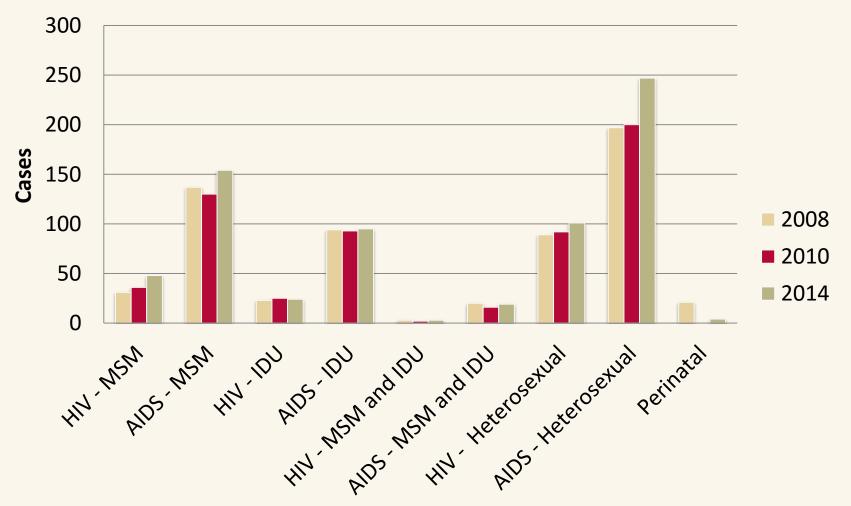
USVI DEPARTMENT OF HEALTH HIV/AIDS SURVEILLANCE TRENDS 2008-2014

Cumulative HIV/AIDS Diagnosis by Year





Cumulative HIV/AIDS Cases by Transmission Category





Number of HIV Tests by Island, 2004-2008





Percent Positive HIV Tests by Island, 2004-2008





HIV Tests 2008

Race	No. of Tests	No. of Positive Tests
White	186	2
Black/African- American Descent	3,283	7
Native Hawaiian	7	0
Asian	9	0
American Indian	23	0
Don't Know	277	4
Declined	125	2
Multiple Race	29	0



HIV Tests 2008

Age Group	No. of Tests	No. of Positive Tests
<13	0	0
13-18	32	0
19-24	1,069	4
25-34	927	2
35-44	575	6
45+	770	3
Unknown	566	0
Sex	No. of Tests	No. of Positive Tests
Male	1,591	8
Female	2,346	7
Transgender FTM	2	0



Local USVI Data Summary

- 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.



USVI HIV Project Methods

- Interview
- Computer Survey
- Participants
 - Community Members
 - Health-care Providers
 - People Living with HIV/AIDS





Questionnaires

- HIV Knowledge Questionnaire
- AIDS Risk Behavior Assessment
- HIV/AIDS Questionnaire for Health Care Providers and Staff
- Comprehensive HIV Needs Assessment Survey
- Interview Guide



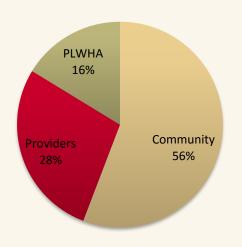
Study Sample

- Total participants: 52
 - 43 participants with computer survey data
- From 2 islands: St. Croix and St. Thomas
 - 23 from St Thomas
 - 29 from St Croix
- 3 categories:
 - Community Members/Leaders
 - Health-care Providers
 - People Living with HIV/AIDS (PLWHA)

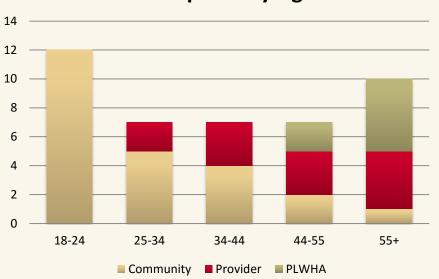


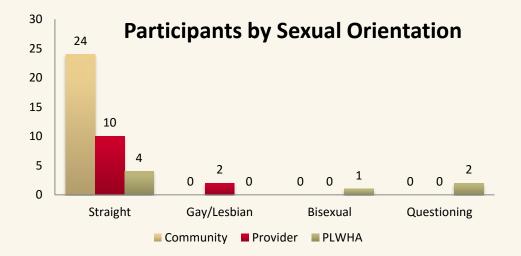


Participants by Group

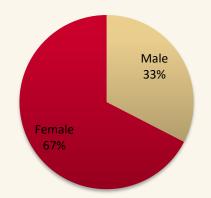


Participants by Age





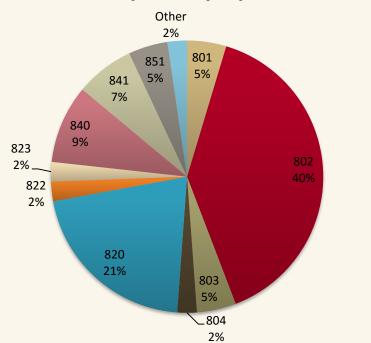
Participants by Gender

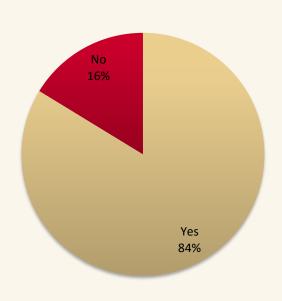




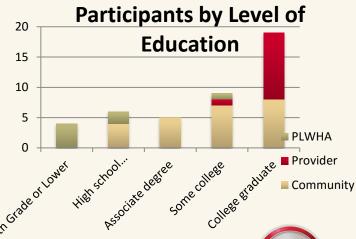


HIV Test (Ever)

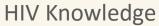


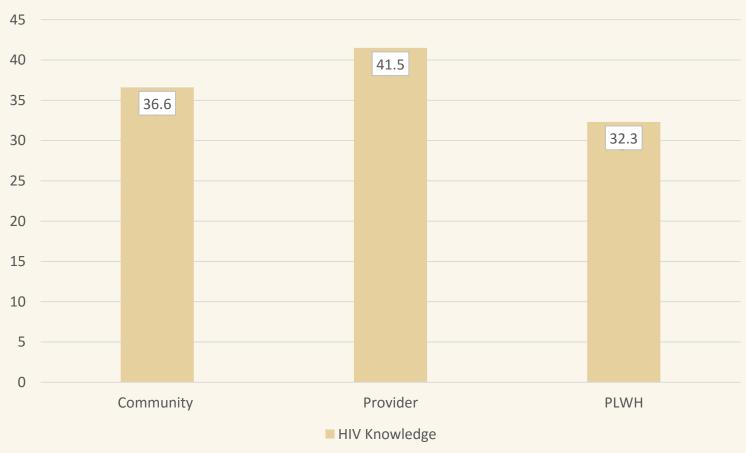


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Average HIV Knowledge Scores







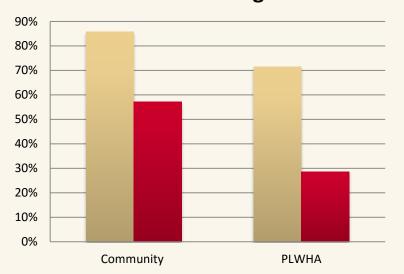
Community Members

- HIV Knowledge Score: 36.6 out of 45 on average!
- Frequently Wrong:
 - True of False: AIDS is the cause of HIV.
 - FALSE!
 - True or False: HIV is killed by bleach
 - TRUE!
 - True or False: Women are always tested for HIV during their pap smears.
 - FALSE!
 - True or False: A person can get HIV by giving blood.
 - FALSE!
 - True or False: If a person tests positive for HIV, then the test site will have to tell all of his or her partners.
 - FALSE!

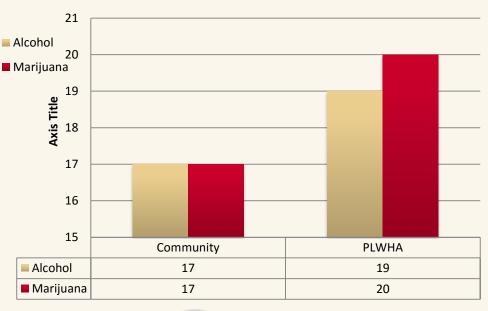


Study Population Risk Factors: Substance Use

Study Population Reported Substance Usage

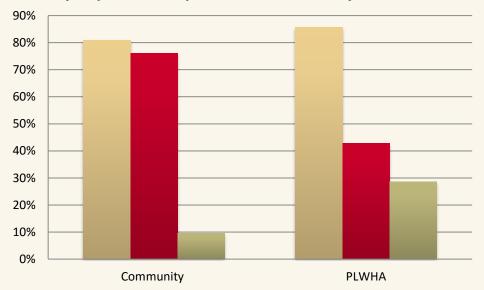


Age at First Substance Use



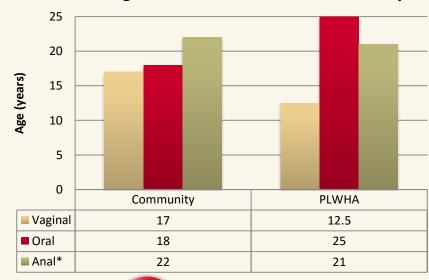


Study Population Reported Sexual Activity



Sexual Activity

Age at First Instance of Sexual Activity



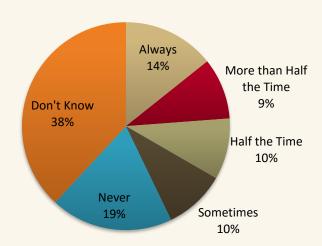
■ Vaginal Sex

■ Oral Sex

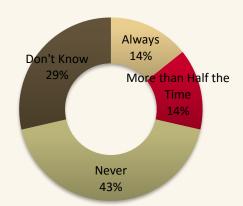
■ Anal Sex



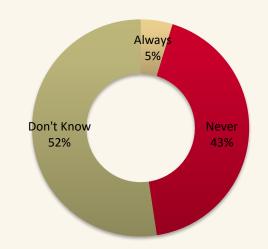
Community Member Condom Usage During Vaginal Intercourse



PLWHA Condom Usage During Vaginal Intercourse



Community Member Condom Usage During Oral Intercourse



Condom Usage



INTERVIEW DATA ANALYSIS

37 OUT OF 52 INTERVIEWS WERE CODED USING NVIVO 10







Perspectives on HIV/AIDS in the USVI

- Is HIV an issue in the Virgin Islands?
 - 32 out of 37 coded interviews believe that HIV is an issue in the Virgin Islands.
- What do you think are some of the factors that contribute to high HIV rates in the US Virgin Islands?
 - 1. Stigma: 52 references
 - 2. Lack of Education: 51 references
 - 3. Unknown Status: 22 references



Perspectives on HIV/AIDS in the USVI

What do you think are some of the practices that contribute to high HIV transmission and high HIV rates in the US Virgin Islands?

1. Unprotected Sex: 48 references

2. Multiple Partners: 28 references

3. Drug Use: 13 references



What are the most important things you think we should know about your this community?

- "Most people know each other...Probably people end up having sex partners in common, because you know, again small population." -Provider
- "You know everyone does for themselves. You know there's nobody you can turn to and be a friend or anything out here because it's so negative out there nowadays you know." - PLWHA
- "Um, my community...everybody is friendly, we're a close-knit community. We help each other, definitely."
- Community Member



Perspectives on HIV

"This is more than likely caused by risky sexual behavior, having multiple partners while pretending to be in a monogamous relationship, and not using condoms or other safe sex methods."

- Community Member

"...they're in denial, and they're still having unprotected sex with everybody. Girlfriends, boyfriend, everybody. Wives and they, they pass it on like that." - - Provider

"I think that also, homophobia is pretty rampant here, so a lot of men don't feel comfortable being in a homosexual relationship, so they'll do it in secret, and sometimes they'll pass on, diseases from that risky sexual behavior to their heterosexual partner."

- Community Member



Accessing Hard to Reach Populations

- What is the best way to reach members of this community who may be at risk for HIV?
 - When? Offering flexible hours at the clinic, during routine visits, and festivals/health fairs.
 - Where? Downtown Christiansted, Sunny Isle, UVI, Mobile units, Facebook.
 - Whom? Junior high, and high school students. Homeless populations and illegal immigrants.
 - How? Some common suggestions were; television ads, radio ads, social media, going into schools and having info sessions.

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Community Resources

- What resources, if any, do you know of in this community to help assess or address HIV or STIs?
 - The most common answers were:
 - 1. HOPE Inc. (St. Thomas)
 - 2. Department of Health (St. Thomas)
 - 3. Frederiksted Clinic (St. Croix)
 - 4. Christiansted Clinic (St. Croix)
 - 5. UVI (both campuses)



Community Resources

- Where else might someone find such resources?
 - Health Fairs, VI Care, Hospital, Pharmacy
- About how far are these resources from your community?
 - Most people stated that resources are no more than 30-40 minutes away from any location.



HIV Resources

- "It is the Family Planning or at Nisky that gives uh lots lots of condoms and contraceptives." - Community Member
- "I know of the Department of Health, the STD clinic." -Community Member
- "From the center for Family Planning is about 10 minutes or less away. And the other other clinic is about 30 minutes away by safari, a dollar. They don't have to go to far of the way, so it's not that hard to reach on this community." - Community Member
- "In regards to condom distribution, we don't- we don't have them going out here, giving condoms out to the community." -PLWHA



Barriers to Accessing HIV Resources

- What, if any, would be some barriers to accessing these resources?
 - 1. Confidentiality Concerns: 62 references
 - 2. Comfort Accessing Resources: 37 references
 - 3. Finances: 35 references
 - 4. Transportation: 30 references



Resource Needs and Access Barriers

What would help make people more likely to, or willing to access these resources?

What might help make people more comfortable accessing these resources?



Resource Needs and Access Barriers (cont'd)

- "Well, the way this culture is, if you throw a party or um some kind of jam to make awareness and offer free drug, free testing there or if you like, I was thinking like if you have a concert right? And then you get in free if you come in to show that you went and got HIV tested or something." - Community Member
- "...offering flexible hours...you know, because of our current socio-economic status here, and fiscal situation of our economy, I mean, a lot of people work two jobs, some people work three jobs." Community Member
- "I mean going out there and actually doing the field work...you're going to reach the people." - PLWHA
- "I think, dedicated facilities, or subsidized costs for, subsized costs for people who need to get tested, or people who need treatment who already know their status." - Community Member



Barriers

"Um the the amount of publicity as to where you can have the testing done...people don't want to walk into HOPE's facility because they know that it's testing for HIV and it's in an area where anybody could see you go through the door."

- Community Member

"It's never easy coming in here (STD/HIV/TB clinic), for me. "
-PLWHA

"Again, people that don't have very good means to get somewhere or relying on rides or are concerned about people talking, that's gonna be another barrier for them to do anything."

- Provider

Access to HIV Testing/Services

- 21 out of 37 interviewees believe that access to testing is easy.
- What would make it easier to access HIV testing services?
 - Mobile units, flexible hours at clinic (I.e. weekend hours and staying open later)
- What could we do to encourage testing?
 - Free testing at public sites, giveaways, and throw community parties



HIV Testing

"I don't say it's that difficult, like I said before, like, ain't too much people want to come in here."

- PLWHA

"If you call us, we go to their house and we do it, I've done it before... I go to you and I test you. So, it's there. There is no reason why they shouldn't be tested. - Provider

"...we have so many health centers here, on the island that there's literally no reason why people shouldn't get HIV testing." - Community Member



Educational Needs

- What, if any, type of educational needs do you or members of your community have?
 - 1. Transmission: 11 references
 - 2. Prevention: 10 references
 - 3. Treatment: 5 references
 - 4. General about HIV/AIDS: 8 references



Community Response

- What type of support does your organization need to address HIV?
 - 1. More education in the schools at the Junior high and high school level.
 - 2. More funding for programs.
 - 3. <u>Simple</u> brochures/flyers for people to grab freely.



"Response" Common Theme

- Many of the participants expressed a desire for more collaboration with the Department of Health.
 - "I think that if we encourage more collaborative work with the Department of Health and the schools to help um promote education..."
 - Provider
 - "...places like the Department of Health to actually come in and have some programs within the school..."- Community Member
 - "...his health department needs innovative ideas, and needs people to help them think about ways to do outreach that are more invested." -Provider
 - "But perhaps...umm...they do the testing, but then I don't know if we have any HIV-positive students here. You could. Umm...So perhaps collaboration between our health services and the Department of Health." Provider

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Limitations

- Very hard to get PLWHA to come forward, due to stigma in community and HIPAA.
- Most of the community members were college students.
- Inconsistent techniques/questioning between interviewers.
- Patients were mostly unable to complete computer survey without assistance, so interviewer had to read questions to the participants, which may have skewed answers.



Community Members Findings





http://keystonehealth.org.php53-12.dfw1-1.websitetestlink.com/keystonehealthhiv/wp-content/blogs.dir/14/files/sites/14/2012/12/aids-awareness.gif



Study Population (Total of 25 community members)

- Gender:
 - 16 female (66.67%)
 - 8 male (33.33%)
- Race:
 - Black/African American: 92%
 - White: 8%
- Age:
 - **18-24:** 50%
 - **25-34: 21%**
 - **35-44:17%**
 - **45+:12%**
- HIV Tested:
 - Yes: 79%
 - No: 21%



http://www.aicrblog.org/wpcontent/uploads/2010/10/People_dreamstime_15640566.jpg



Study Questions

- Statistics show that the rate of HIV is high for the USVI population. Why do you think this might be?
- What are some of the barriers to accessing community resources?
- What specific information would you be interesting in knowing or learning more about in regards to HIV/AIDS
- What makes it difficult for community members to access services like HIV testing?



Education

"I think mainly in the youth...they need more education...as to how it is contracted...they need to take protection...a lot of the young girls and guys are not protecting themselves, and I think that they don't know much about safe sex"

"I think it goes back to...the education of the disease and...knowing that you can control it, knowing that you can live...a normal, healthy life if...you're in care and receiving the necessary medications, treatment"



Confidentiality

"When it comes to testing you walk into the facility that says 'infectious disease, sexually transmitted diseases, STD clinic'...it's directly across from the recreation center...the bus stop...from a little food cart...that people can sit and watch who goes in and who goes out of the clinic."

"I know lots of patients who won't come to the public health department here because they worry that someone will talk about it...I had people sneaking in the back door, calling me before they came to ask would we open the back door so they can come in."



Stigma

"There's a lot of stigma here...the people here...they're well educated, but God help you if you have HIV. It's like a different animal...people need to change their perspectives on health, on HIV, it's not a death sentence anymore...people can live long, healthy lives..."

"It is a small community and I think they're scared that they will be labeled and if you tell one person, that person might tell somebody, that person might tell...it's a fear of being labeled and frowned upon because it's a very small community – everybody knows everybody"



Participant Suggestions

"...maybe the Commissioner of Health or one of the deputies could really get out there...even if it's writing an op-ed piece on...HIV and the status of what the department is doing...would be helpful"

"...maybe some more joint activities where you have the non-profits that work with HIV partner with the Department of Health and the hospitals...and release some more global messaging...just do some messaging, and I think that would be helpful"

"They need to hear these messages. We need to have commercials, we need to have it in the paper, we need to have it out there, especially on TV. we need billboards...we need to start getting those billboards on the buses...but because of all of the silences and stigma...it's like they don't want to do it, but this is a real issue...and we're dealing with it, and the more we stay in denial, the less we're helping people and helping ourselves...if we stay in this denial, we can't be helped"



Preliminary Suggestions

- HIV/AIDS videos
- HIV advocacy
- Regular testing during physical
- Education (college students teach high school students who teach middle school)



Local Resources

- St. Croix
 - VICARE
 - Frederiksted Health Clinic
 - Governor Juan F. Luis Hospital
 - HIV/STD Clinic
- St. Thomas
 - Roy Lester Schneider Hospital
 - Red Hook Family Practice
 - HOPE
 - HIV/STD Clinic
 - East End Clinic
- St. John
 - Myrah Keating Smith Community Health Clinic





PRESENTATION OUTCOMES

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Understand and Describe general HIV prevalence in the USVI.	Discussion of HIV/AIDS prevalence rates and statistics and summary of the National HIV/AIDS strategy.
Identify HIV-focused needs of people residing in the US Virgin Islands	Describe quantitative and qualitative results of the HIV-focused needs assessment conducted in the USVI.
Identify factors that contribute to high HIV rates in the USVI, including barriers to HIV testing.	Describe quantitative and qualitative results of the HIV-focused needs assessment conducted in the USVI.



QUESTIONS?



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