



**2013 Rhode Island  
HIV/AIDS/Viral Hepatitis  
Epidemiologic Profile with Surrogate Data**

*Updated March 2015*

## Table of Contents

<b>1) Introduction.....</b>	<b>3</b>
<b>2) Surveillance Methods.....</b>	<b>3</b>
Surveillance Authority.....	3
Case Definitions.....	3
Data Repositories.....	4
Data Limitations.....	5
<b>3) HIV/AIDS Surveillance Reports.....</b>	<b>7</b>
○ HIV in Rhode Island: 2013 Highlights.....	7
○ 5 Year Trend Data-HIV in Rhode Island: 2009-2013.....	8
○ Gender.....	10
○ Age.....	12
○ Race and Ethnicity.....	14
○ Exposure Category.....	15
○ Deaths.....	16
○ AIDS surveillance trends.....	18
○ Pediatric HIV/AIDS Cases.....	20
○ MSM ‘Men who have sex with men’.....	20
○ Minority Women.....	23
○ Persons Unaware of Their HIV Status.....	25
○ Youth.....	26
<b>4) Surrogate Data in Rhode Island.....</b>	<b>28</b>
○ Rhode Island STD Epidemiology 2012.....	28
○ Integrated HIV/Viral Hepatitis Counseling, Testing, Referral and Immunization Services.....	31
○ ENCORE: Rhode Island’s Needle Exchange Program.....	47
○ Active Tuberculosis in Rhode Island.....	40
○ Viral Hepatitis C in Rhode Island.....	44
○ Behavioral Risk Factor Surveillance System (BRFSS).....	48
○ Youth Risk Behavior Survey (YRBS).....	48
<b>5) Socio-Demographics characteristics of the population of Rhode Island.....</b>	<b>50</b>
<b>6) List of Figures and Tables.....</b>	<b>54</b>
<b>7) Staff Acknowledgement.....</b>	<b>56</b>

## 1. Introduction

The Rhode Island Department of Health (HEALTH) HIV Surveillance Program maintains records on the HIV epidemic since it started in 1982. In RI, 3,612 cases of HIV and AIDS and 1,591 deaths from HIV/AIDS have been reported as of 2013. Major strides in prevention and treatment have altered the pace and reach of the epidemic, and after a plateau we are in a phase of decline. However, much work still needs to happen to get us to zero native transmission in RI. One of the major interventions will be to keep the estimated 2,500 persons living with HIV and AIDS in RI connected to care and have their viral loads suppressed to prevent transmission. At the same time global and targeted prevention efforts in collaboration with community partners must continue.

This Epidemiologic Profile provides detailed surveillance data about the current status of the HIV/AIDS epidemic, and presents the last 5 years data trends (2009-2013). The profile focuses on data related to persons diagnosed with HIV, persons with HIV who have progressed to AIDS, HIV/AIDS related deaths, and those populations who are experiencing a disproportionate burden of illness from HIV. Included are additional data reports for tuberculosis, Sexually Transmitted Diseases (STDs), hepatitis C, behavioral survey data and descriptive data related to the needle exchange/harm reduction program and counseling/testing/referral programs. The last section provides a review of the socio-demographic profile of the population of Rhode Island.

## 2. Surveillance Methods

### Surveillance authority:

Reporting is mandated in accordance with Rhode Island's General Laws, Chapter 23 Prevention and Suppression of Contagious Diseases – HIV/AIDS which can be accessed at <http://webserver.rilin.state.ri.us/Statutes/TITLE23/23-6.3/INDEX.HTM> and the “Rules and Regulations Pertaining to HIV Counseling, Testing and Reporting, and Confidentiality” which can be accessed at [R23-6.3-HIV]

Name reporting of HIV cases has been required since July 2006.

### Case definitions:

In its collection, assessment, and aggregation of HIV and AIDS reports, the Rhode Island HIV Surveillance Program conforms to surveillance case definitions of HIV and AIDS published by the Centers for Disease Control and Prevention (CDC). Case definitions have been nationally published in 1986, 1987, 1992, 1993, 1999, 2008, and most recently in 2014.

- CDC. Classification system for human T-lymphotropic virus type III/lymphadenopathy-associated virus infections. MMWR 1986; 35:334.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/00033677.htm>

- CDC. Revision of the CDC surveillance case definition for acquired immunodeficiency syndrome. MMWR 1987; 36:1-15S.  
<http://www.cdc.gov/mmwr/pdf/other/mmsu3601.pdf>
- CDC. 1993 Revised Classification System for HIV Infection and Expanded Surveillance Case Definition for AIDS Among Adolescents and Adults. MMWR 1992; 41(RR-17).  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/00018871.htm>
- CDC. Appendix: Revised Surveillance Case Definition for HIV Infection. MMWR 1999; 48(RR13); 29-31.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4813a2.htm>
- CDC. Revised Surveillance Case Definitions for HIV Infection Among Adults, Adolescents, and Children Aged <18 Months and for HIV Infection and AIDS Among Children Aged 18 Months to <13 Years — United States, 2008. MMWR 2008; 57(RR 10); 1-12.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5710a1.htm>
- CDC. Revised Surveillance Case Definitions for HIV Infection – United States, 2014. MMWR 2014; 63(RR 03); 1-10.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6303a1.htm>

It is important to note that revisions in the CDC surveillance definitions of HIV and AIDS may cause discontinuities in trend data. For example, between 1992 and 1993, the number of AIDS cases in Rhode Island and in the United States as a whole increased dramatically because of CDC's expanded surveillance case definition for AIDS.

### Data Repositories

Case surveillance of AIDS was initiated in Rhode Island in 1983, and HIV surveillance began in 2000. These surveillance systems provide information on risk factors, patient demographics, laboratory tests, and the clinical manifestations of disease over time. The present Epidemiologic Profile relies primarily on these case surveillance data. However, the program utilizes an array of data sources to establish the most complete and accurate picture of HIV and AIDS in Rhode Island and the populations at highest risk for infection. The list below identifies many of the sources of information used.

**HARS:** Implemented in 1983 this was a repository of all AIDS cases by name (from 1983) and in addition, HIV cases were first added to this system starting in 2000. HARS data was synthesized into a composite database called eHARS in 2008

**HIV Unique-Identifier Reporting System:** Implemented in 2000, providers were required to report all cases of HIV infection with a unique patient identifier and *without* names until June 2006. These records were stored in the Unique Identifier System Database. This provides an unduplicated count of cases from Jan 2000 to June 2006. Starting July 2006, HIV cases have been reported *with* names and are stored in the eHARS database described below.

**eHARS (enhanced HIV/AIDS Reporting System):** Implemented in 2008 as an upgrade of HARS (HIV/AIDS Reporting System), and is a repository of all AIDS cases reported since 1983 and all HIV cases reported by name since 2006. This system has the capacity to store multiple case reports and laboratory reports for each person.

**Cerner** (*State Health Laboratory Information System*): Includes all positive and negative HIV test results submitted to the Rhode Island Department of Health State Laboratories.

**CTR** (Counseling, Testing and Referral Database): - Provides information on all HIV tests and services provided at CTR sites funded by the Rhode Island Department of Health.

**BRFSS** (Behavioral Risk Factor Surveillance System): – A randomized telephone survey which is conducted annually focusing upon Rhode Islanders selected for the sample.

**YRBS** (Youth Risk Behavior Survey): – Focusing upon adolescent youth, this survey is administered at the school level.

**STD\*MIS Database**: A repository of STD reports of chlamydia, gonorrhea and syphilis reports, from the STD Program.

**NEDSS Tuberculosis Database**: Reportable disease database of the Tuberculosis Program.

**Cancer Registry**: This reportable disease database is used for identifying individuals with AIDS-defining malignancies.

**Hospital Medical Records**: Patient medical records are utilized in AIDS validation studies and in the follow-up of previously reported cases.

### Data Limitations

The ideal HIV/AIDS surveillance system should be capable of detecting and accurately detailing all new HIV infections, to serve the purpose of providing information to HIV prevention programs so as to accurately reflect the current factors causing people to be at risk. Since 1983, the Department of Health has required the reporting of all AIDS cases by name and since 1989 has required all HIV positive test results to be reported. This HIV positive test result was collected without names or other identifying information in order to protect the anonymity of patients. However, this "no names/no identifiers" system fostered duplication and incomplete information. As a result, a new HIV reporting system was implemented in 2000 which used a unique identifier code to maintain patient anonymity, but essentially eliminated case duplication and allowed for more complete, accurate and timely reporting and analysis. This new HIV reporting system greatly improved our ability to conduct HIV surveillance. Most recently, in 2006, HIV name reporting became a Federal requirement to obtain funds for prevention. RI, therefore, adopted name reporting and as a result, the accuracy and quality of our database has been enhanced and reflected from 2006 forward.

An important notation regarding HIV incidence is relevant here, despite the recent changes in the reporting of HIV, it is important to note that a newly reported case of HIV (or in the past an HIV positive test) does not necessarily signify a recent infection with HIV. Many individuals are unaware or are unwilling to be tested for HIV, and therefore may be tested and diagnosed long after the initial infection occurred. Moreover, an individual infected with

HIV may not progress to AIDS for many years, thereby making AIDS data potentially unreliable for the purpose of detailing current transmission patterns. For more information pertaining to the recently released HIV incidence data report from CDC go to <http://www.cdcnpin.org/scripts/hiv/whatsnew.asp> Providers may see many cases in a period of time which can create the perception of rapidly increasing case numbers. However, that does not necessarily translate into a surveillance measure of increasing incident cases, as many of the cases are importations from prior care in other states or abroad, or are returning to care after a period of absence, and are already in our database.

Third parties, most frequently health care providers, report much of the data needed by the HIV Surveillance Program. As a result, these reports rely on the patients and providers to accurately and completely disclose relevant information pertaining to risk factors, demographic characteristics and clinical history. Considerable effort is put into de-duplicating cases already in the system, investigating whether the case has been counted as a case in another state using CDC's SOUNDEX methodology and also to cross match with the national death index registry to document deaths.

### 3. HIV/AIDS Surveillance Report

#### A) HIV in Rhode Island: 2013 Highlights

Between January 1, 2013 and December 31, 2013 there were total of 74 Rhode Island residents newly diagnosed with HIV and reported to the surveillance program. This number provides a minimum estimate of HIV infection, as it does not include HIV infected individuals who have not been tested yet and those who get tested anonymously (Table1).

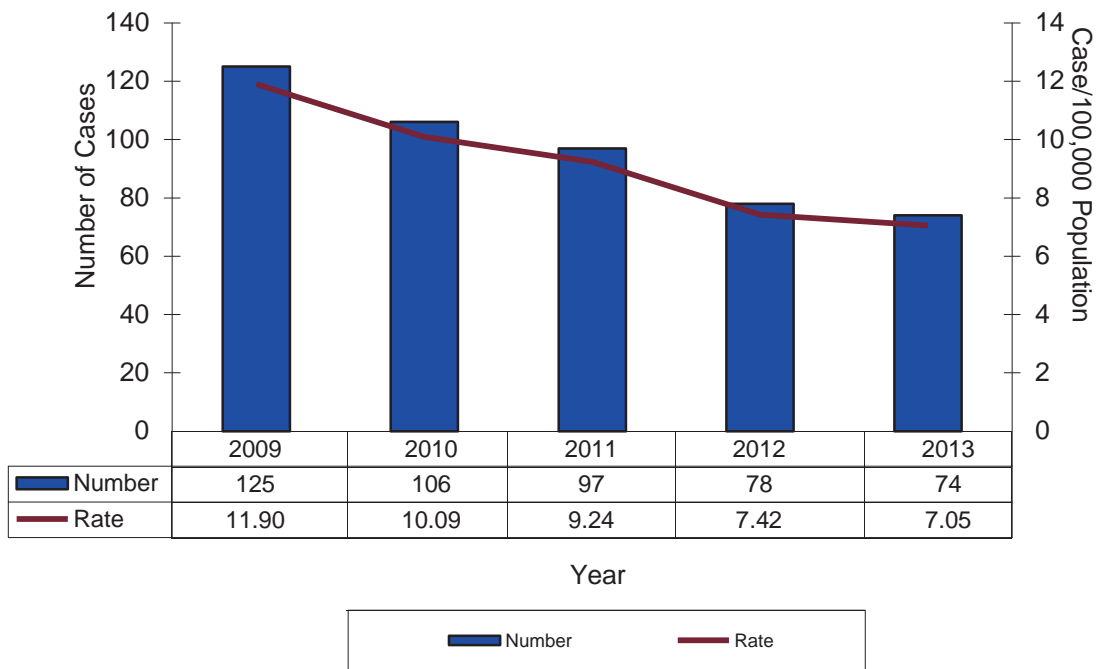
#### **Of the 74 cases diagnosed and reported to HEALTH during this year:**

- Males accounted for 78% (n 58, incidence rate of 11.4 per 100,000) of the cases and females accounted for 22% (n 16, incidence rate 3 cases per 100,000).
- Majority of cases were between the ages of 20-29 (36%, n 27) and 30-39 (26%, n 19).
  
- **By Race/Ethnicity:**
  - Among men, Whites accounted for the majority of cases (62%, n 36, incidence rate of 8.25 cases per 100,000 population), followed by Hispanics (21%, n 12, incidence rate of 18.48 cases per 100,000 populations) and African Americans (10%, n 6, incidence rate of 16.2 cases per 100,000 population).
  - Among women, African Americans (44%, n 7, incidence rate of 17.7 cases per 100,000 population) and Whites (31%, n 5, incidence rate of 1.1 per 100,000 population) accounted for the majority of cases.
  
- **By mode of exposure to HIV:**
  - Among men, men who have sex with men (MSM) is the leading mode of exposure (69%, n 40), followed by 'No Risk Reported' (14% n 8) and 'Heterosexual Contact' (10%, n 6).
  - Among women, 'Heterosexual Contact' is the leading mode of exposure (44%, n 7), followed by 'IDU' (31%, n 5).
  
- **By county of residence:**
  - The majority of the cases (81%, n 59) were from Providence County.

## B) 5 Year Trend Data-HIV in Rhode Island: 2009-2013

Overall numbers of new HIV reports have trended downwards (Fig 1). These numbers include RI residents with a first positive test, foreign born nationals with known HIV establishing residency in RI for the first time and also cases of AIDS presenting for the first time in this period. Excluded are all cases that were first diagnosed and reported in another state in the US and then moved to reside in RI and all previously reported cases were excluded.

**Figure 1. Rhode Island HIV Incidence 2009-2013**





**Table 1. HIV Cases: Demographics and Risk Factor Characteristics  
RI 2009 to 2013**

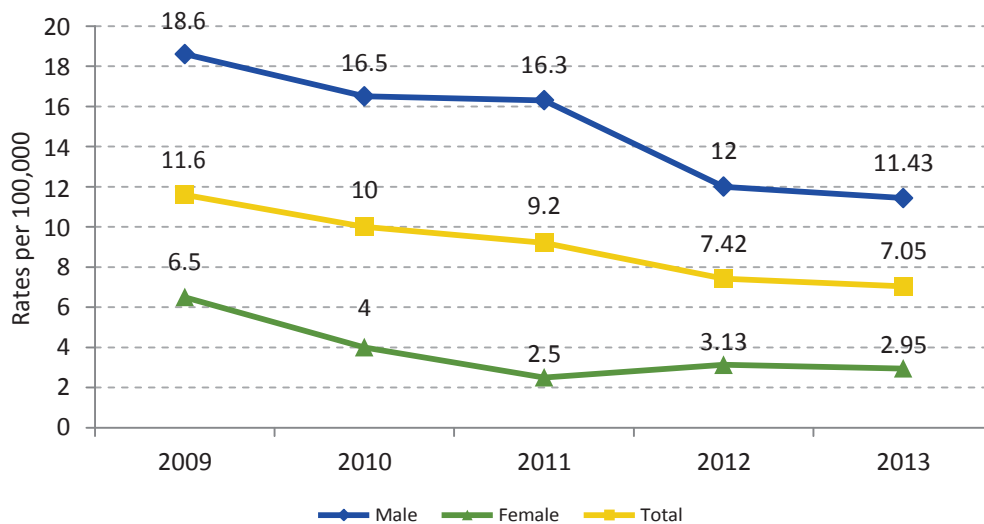
Year	2009	2010	2011	2012	2013
<b>Gender</b>					
Male	95 (76%)	84 (79%)	83 (86%)	61 (78%)	58 (78%)
Female	30 (24%)	22 (21%)	14 (14%)	17 (22%)	16 (22%)
Total	125 (100%)	106 (100%)	97 (100%)	78 (100%)	74 (100%)
<b>Age Group</b>					
<13	<5*	<5*	<5*	<5*	<5*
13-19	<5*	8 (7%)	<5*	<5*	<5*
20-29	30 (24%)	20 (19%)	24 (25%)	23 (30%)	27 (36%)
30-39	29 (23%)	27 (25%)	30 (31%)	21 (27%)	19 (26%)
40-49	36 (29%)	27 (25%)	29 (30%)	18 (23%)	13 (18%)
50+	27 (22%)	24 (23%)	13 (13%)	15 (19%)	13 (18%)
Total	125 (100%)	106 (100%)	97 (100%)	78 (100%)	74 (100%)
<b>Race/Ethnicity</b>					
White	39 (31%)	47 (44%)	54 (56%)	38 (49%)	41 (55%)
African American	33 (26%)	26 (25%)	14 (14%)	17 (22%)	13 (18%)
Hispanic	50 (40%)	27 (26%)	22 (23%)	19 (24%)	16 (22%)
Asian	<5*	<5*	<5*	<5*	<5*
Native American	<5*	<5*	<5*	<5*	<5*
Total	125 (100%)	106 (100%)	97 (100%)	78 (100%)	74 (100%)
<b>Risk Factor</b>					
MSM	59 (47%)	54 (51%)	62 (64%)	38 (49%)	40 (54%)
IDU	8 (6%)	6 (6%)	<5*	<5*	6 (8%)
MSM / IDU	<5*	<5*	<5*	<5*	<5*
Heterosexual Contact	16 (13%)	13 (12%)	12 (12%)	26 (33%)	13 (18%)
Transfusion	<5*	<5*	<5*	<5*	<5*
Mother with HIV / HIV Risk	<5*	<5*	<5*	<5*	<5*
No Risk Reported	36 (29%)	32 (30%)	15 (15%)	9 (12%)	12 (16%)
Total	125 (100%)	106 (100%)	97 (100%)	78 (100%)	74 (100%)
<b>County of Residence</b>					
Homeless	<5*	<5*	<5*	<5*	<5*
Bristol	<5*	<5*	<5*	<5*	6 (8%)
Kent	7 (5%)	9 (9%)	8 (9%)	6 (8%)	5 (7%)
Newport	8 (6%)	8 (8%)	6 (7%)	<5*	<5*
Providence	100 (80%)	81 (77%)	69 (76%)	67 (88%)	59 (81%)
Washington	6 (5%)	6 (6%)	<5*	<5*	<5*
Total	125 (100%)	106 (100%)	97 (100%)	78 (100%)	74 (100%)

\* Cell contains less than five cases

### C) Gender

More male cases continue to be diagnosed in Rhode Island than females. Cases for both genders are generally trending downwards. However, there was a marginal increase in female cases in 2012. The incidence rate for male HIV cases was 11.43/100,000 cases compared to the female HIV incidence rate of 2.95/100,000 cases, with an overall rate for 7.05/100,000 for Rhode Island in 2013. MSM remains the greatest risk factor among males, whereas for females it is heterosexual exposure and in many cases “unknown” exposures (Table 2 and 3).

**Figure 2. HIV Case Rates by Gender  
RI, 2009 to 2013**



\*Rates are based on the 2010 U.S. Census Bureau population estimates.

**Table 2. Male HIV Cases: Demographic and Risk Factor Characteristics,  
RI, 2009 - 2013**

Year	2009	2010	2011	2012	2013
<b>Age Group</b>					
<13	<5*	<5*	<5*	<5*	<5*
13-19	<5*	<5*	<5*	<5*	<5*
20-29	23 (24%)	16 (19%)	22 (25%)	20 (33%)	21 (36%)
30-39	23 (24%)	25 (30%)	25 (30%)	14 (23%)	15 (26%)
40-49	27 (28%)	22 (26%)	25 (30%)	15 (25%)	12 (21%)
50+	20 (21%)	17 (20%)	11 (13%)	11 (17%)	9 (15%)
Total	95 (100%)	84 (100%)	83 (100%)	61 (100%)	58 (100%)
<b>Race/Ethnicity</b>					
White	35 (37%)	41 (48%)	50 (60%)	35 (57%)	36 (62%)
African American	21 (22%)	16 (19%)	11 (13%)	11 (18%)	6 (10.24%)
Hispanic	36 (38%)	21 (25%)	16 (13%)	13 (21%)	12 (20.69%)
Asian	<5*	<5*	<5*	<5*	<5*
Native American	<5*	<5*	<5*	<5*	<5*
Total	95 (100%)	84 (100%)	83 (100%)	61 (100%)	58 (100%)
<b>Risk Factor</b>					
MSM	59 (62%)	54 (64%)	62 (75%)	38 (62%)	40 (69%)
IDU	5 (5%)	<5*	<5*	<5*	<5*
MSM / IDU	<5*	<5*	<5*	<5*	<5*
Heterosexual Contact	<5*	<5*	5 (6%)	14 (23%)	6 (10.34%)
Transfusion	<5*	<5*	<5*	<5*	<5*
Mother with HIV / HIV Risk	<5*	<5*	<5*	<5*	<5*
No Risk Reported	23 (23%)	22 (26%)	9 (11%)	5 (8%)	8 (13.79%)
Total	95 (100%)	84 (100%)	83 (100%)	61 (100%)	58 (100%)

\* Cell contains less than five cases

**Table 3. Female HIV Cases: Demographic and Risk Factor Characteristics, RI, 2009 - 2013**

Year	2009	2010	2011	2012	2013
<b>Age Group</b>					
<13	<5*	<5*	<5*	<5*	<5*
13-19	<5*	<5*	<5*	<5*	<5*
20-29	5 (16%)	<5*	<5*	<5*	6 (38%)
30-39	8 (27%)	<5*	<5*	7 (41%)	<5*
40-49	9 (30%)	5 (22%)	5 (36%)	<5*	<5*
50+	7 (24%)	7 (31%)	<5*	<5*	<5*
Total	30 (100%)	22 (100%)	14 (100%)	17 (100%)	16 (100%)
<b>Race/Ethnicity</b>					
White	<5*	6 (27%)	<5*	<5*	5 (31%)
African American	12 (40%)	10 (45%)	<5*	6 (35%)	7 (44%)
Hispanic	14 (47%)	6 (27%)	6 (43%)	6 (35%)	<5*
Asian	<5*	<5*	<5*	<5*	<5*
Native American	<5*	<5*	<5*	<5*	<5*
Total	30 (100%)	22 (100%)	14 (100%)	17 (100%)	16 (100%)
<b>Risk Factor</b>					
IDU	<5*	<5*	<5*	<5*	5 (31%)
Heterosexual Contact	12 (40%)	10 (45%)	7 (50%)	12 (71%)	7 (44%)
Transfusion	<5*	<5*	<5*	<5*	<5*
Mother with HIV / HIV Risk	<5*	<5*	<5*	<5*	<5*
No Risk Reported	14 (46%)	10 (45%)	6 (43%)	<5*	<5*
Total	30 (100%)	22 (100%)	14 (100%)	17 (100%)	16 (100%)

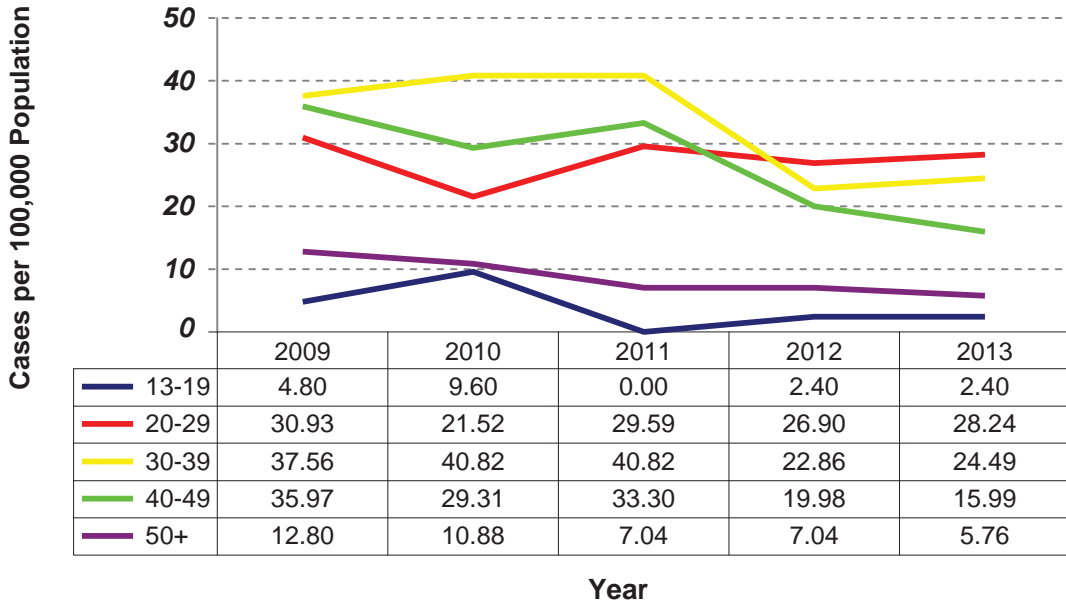
\* Cell contains less than five cases

## D) Age

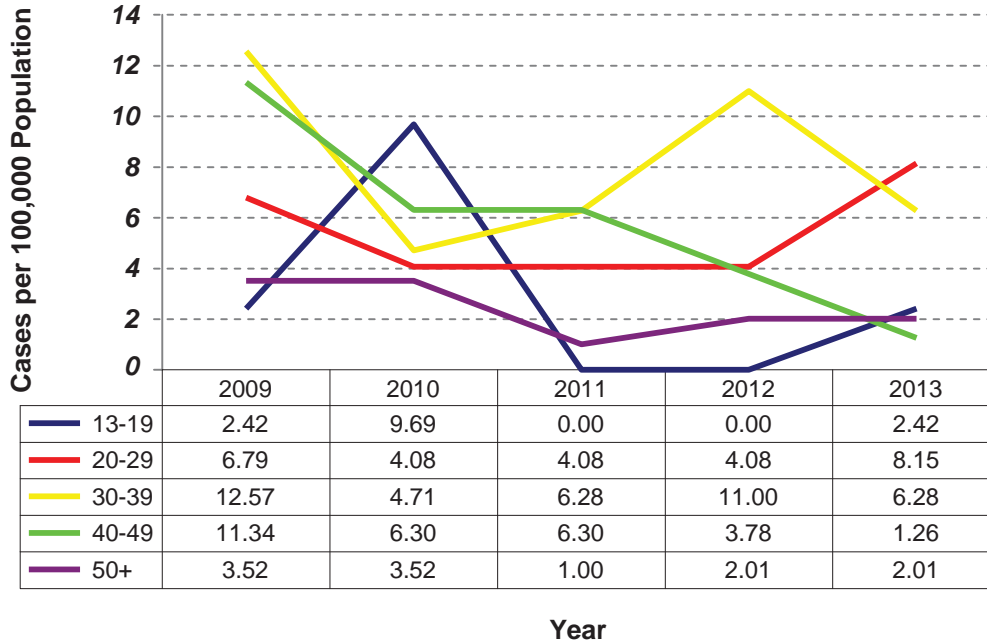
The age distribution of newly identified HIV cases has changed over the past five years. As seen in Table 1, HIV cases diagnosed between 2009 and 2011 were predominantly in the 40-49 and 30-39 age groups. However, around the same time, HIV cases in the younger age group of 20-29 showed a gradual increase. In 2010, the newly diagnosed HIV cases were evenly distributed in the three age-groups: 20-29, 30-39 and 50+.

In 2011, the 20-29 age group continued to rise among newly diagnosed HIV cases and in 2012 and 2013 it was the predominant age group among new cases (30% and 36% respectively). The distribution of age was more prominent among male HIV cases than females (tables 2, 3) when looking at the 2013 new cases by gender. Figures 3 and 4 show the age group distribution for past five years.

**Figure 3: Rate of HIV New Diagnosis by Age group among Males  
RI 2009-2013**



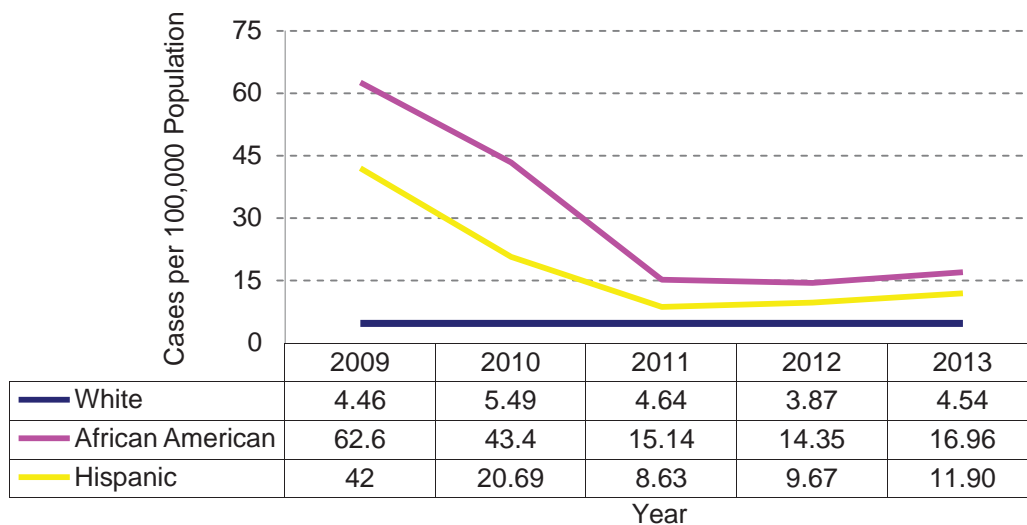
**Figure 4: Rate of HIV New Diagnosis by Age group among Females  
RI 2009-2013**



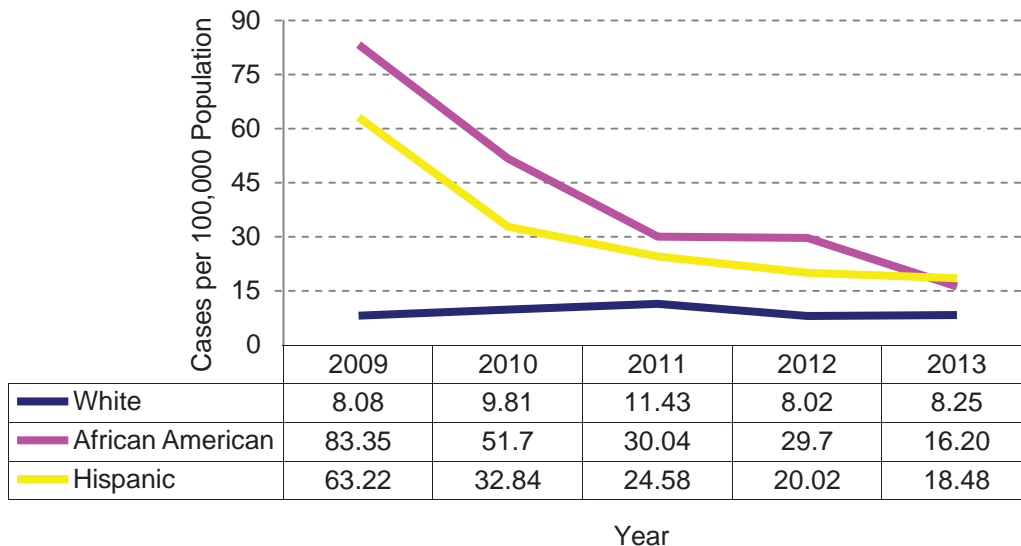
## E) Race and Ethnicity

From 2009 to 2013, the majority of HIV cases in Rhode Island have occurred in Whites (45.6%) followed by Hispanics (27.9%) and African American (21.5%). The Black/African American community is experiencing the highest impact of HIV/AIDS. They account for nearly 22% of newly identified cases but only represent 7% of the total population. The incident rate for Black/African Americans has declined but is still greater than all other racial/ethnic groups at roughly 17 cases per 100,000. Hispanics are disproportionately burdened by the HIV/AIDS epidemic as well. They account for nearly 30% of all HIV cases whereas only 13% of the total population of Rhode Island is Hispanic. The incidence rate for HIV is 12 cases per 100,000 among Hispanics.

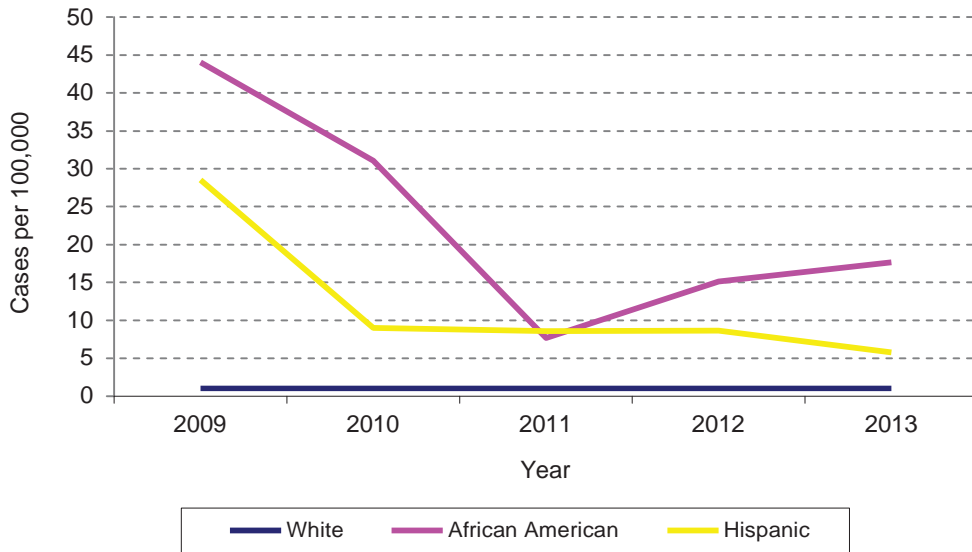
**Figure 5: Rate of HIV New Diagnosis by Race and Ethnicity  
RI 2009-2013**



**Figure 6: Male Rate of HIV New Diagnosis by Race and Ethnicity  
RI 2009-2013**



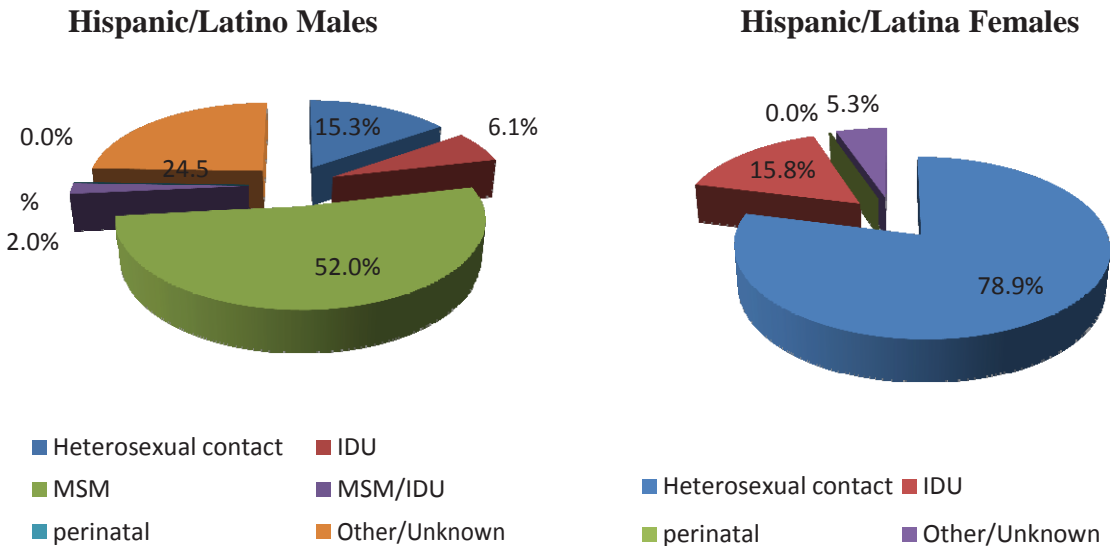
**Figure 7: Female Rate of HIV New Diagnosis by Race and Ethnicity  
RI 2009-2013**



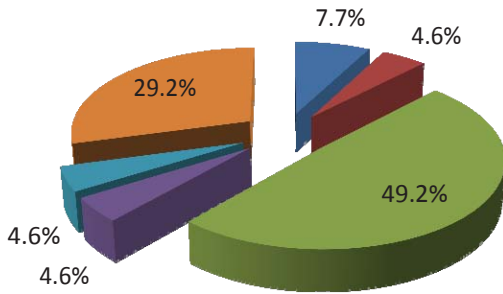
**F) Exposure Category**

Men who have sex with men sexual contact continues to increase and is the predominant exposure category among all HIV cases between 2009 and 2013. This marks a shift as injecting drug use (IDU) has not been a dominant risk behavior in the last five years. IDU-associated (7%) HIV infection has shown a marked decrease, as has heterosexual contact (HSX-19%). Figures 8-13 show the average distribution of exposure category by gender and race/ethnicity among HIV cases for 2009-2013.

**Figures 8 -13: HIV Cases by Gender, Race/Ethnicity and Risk Factor  
RI 2009-2013**

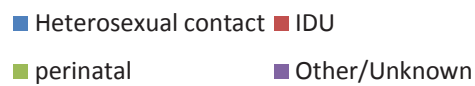
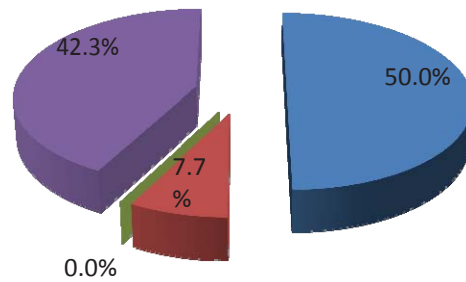


### Black/African American Males

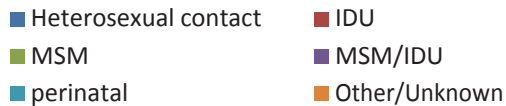
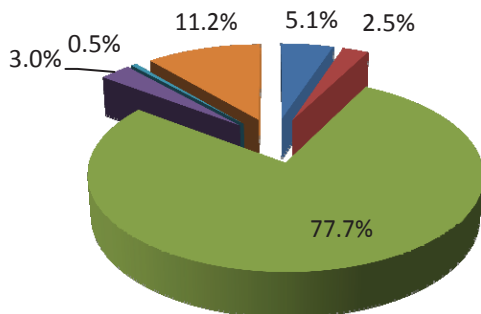


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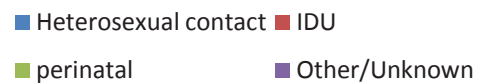
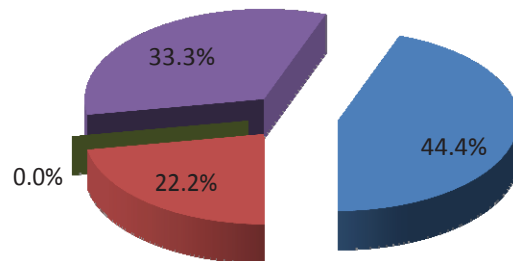
### Black/African American Females



### White Males



### White Females



## G) Deaths

In Rhode Island, from 2009 to 2013, 123 deaths occurred among persons with HIV/AIDS and since 1983, a total of 1,598 deaths have occurred among RI residents diagnosed with HIV/AIDS. Since the availability of Highly Active Anti-retroviral therapy (HAART) the number of HIV/AIDS related deaths has steadily declined in Rhode Island. Due to advances in clinical therapy and antiretroviral medications, the population living with HIV/AIDS has grown to a much larger size over the past several years. The number of deaths reported is influenced by a

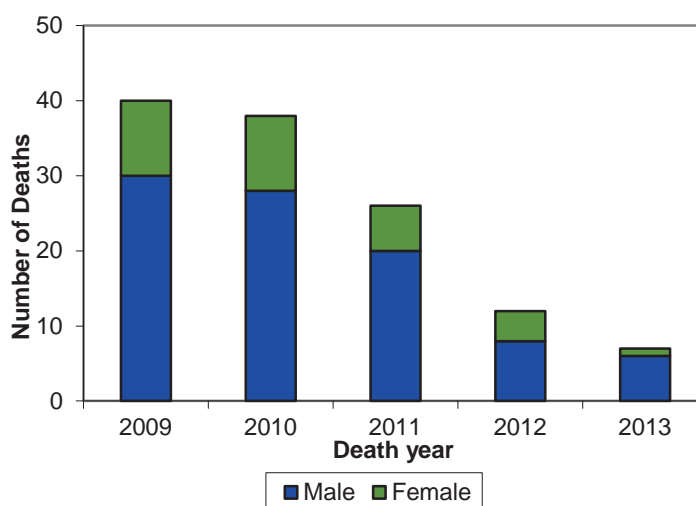


reporting delay in the number of actual reported deaths to the HIV Surveillance program. Currently death data is obtained from the State Vital Records Office, and National Death Index. In 2014 the HIV Surveillance program began receiving death data is from the Social Security Death Master File Program, adding an additional resource for informing HIV Surveillance data. The death numbers change continuously as more data become available to the program. As the diagram below shows, there was a higher number of deaths from 2009-2010, compared to more recent years, 2011-2013. The demographic profiles of deaths among HIV/AIDS cases are similar to that of newly identified cases of HIV/AIDS with regard to gender, race/ethnicity, and exposure category.

**Table 4. HIV/AIDS Deaths by Demographic Characteristics, RI, 2009-2013**

Demographic Characteristics	Counts (%)
<b>Gender</b>	
Male	106 (74.6%)
Female	36 (25.4%)
Total	142 (100%)
<b>Age Group</b>	
20-29	<5 *
30-39	12 (8.5%)
40-49	34 (23.9%)
50-59	70 (49.3%)
60-69	19 (13.4%)
70+	<5 *
Total	142 (100%)
<b>Race/Ethnicity</b>	
White	70 (49.3%)
African American	42 (29.6%)
Hispanic	25 (17.6%)
American In/ Alaska Native	<5 *
Multiracial/Other	<5 *
Total	142 (100%)
<b>Country of Birth</b>	
US Born	114 (80.3%)
Non-US Born	28 (19.7%)
Total	142 (100%)

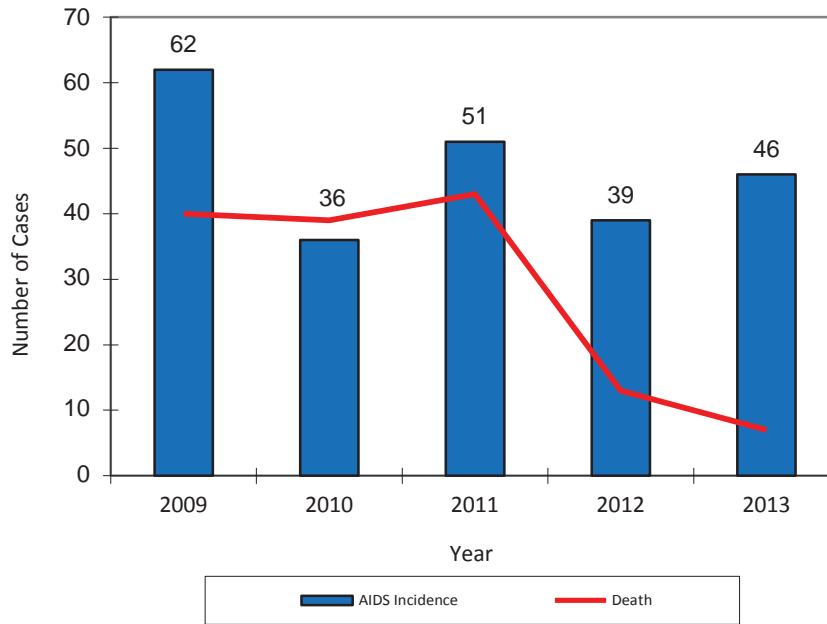
**Figure 14: HIV/AIDS Deaths by Gender, RI, 2009-2013**



## H) AIDS surveillance trends

Figure 15 shows the number of individuals who progressed to AIDS during each of the years, 2009-2013. This figure includes individuals who were initially diagnosed with HIV and AIDS as well as historic HIV cases that progressed to AIDS during the year of interest. There has been an overall decrease in the number of individuals progressing to AIDS during these years. There has been a more substantial decrease in the number of deaths reported among HIV/AIDS cases.

**Figure 15. Cases of HIV progressing to AIDS and Deaths, RI, 2009 - 2013**



**Table 5. AIDS Cases: Demographic and Risk Factor Characteristics  
Rhode Island 2009-2013**

<b>Demographic Characteristics</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Gender</b>					
Male	46 (74%)	25 (69%)	45 (88%)	29 (74%)	37 (80.4%)
Female	16 (26%)	11 (31%)	6 (12%)	10 (26%)	9 (19.6%)
Total	62 (100%)	36 (100%)	51 (100%)	39 (100%)	46 (100%)
<b>Age Group</b>					
<13	<5*	<5*	<5*	<5*	<5*
13-19	<5*	<5*	<5*	<5*	<5*
20-29	9 (15%)	<5*	8 (15%)	<5*	6 (13.0%)
30-39	15 (24%)	12 (33%)	12 (24%)	13 (33%)	9 (19.6%)
40-49	25 (40%)	8 (22%)	23 (45%)	10 (26%)	9 (19.6%)
50+	13 (21%)	13 (36%)	8 (15%)	12 (31%)	21 (45.7%)
Total	62 (100%)	36 (100%)	51 (100%)	39 (100%)	46 (100%)
<b>Race/Ethnicity</b>					
Hispanic-All Races	24 (40%)	8 (22%)	12 (23%)	13 (33%)	13 (28.3%)
American Indian/Alaska Native	<5 *	<5 *	<5*	<5*	<5*
Asian	<5 *	<5 *	<5*	<5*	<5*
African American	18 (29%)	8 (22%)	9 (18%)	9 (23%)	5 (10.9%)
Native Hawaiian/Pacific Islander	<5 *	<5 *	<5*	<5*	<5*
White	19 (31%)	18 (50%)	28 (54%)	15 (38%)	27 (58.7%)
Total	62 (100%)	36 (100%)	51 (100%)	39 (100%)	46 (100%)
<b>Exposure Category</b>					
MSM	23 (37%)	15 (41%)	24 (47%)	14 (36%)	19 (41.3%)
IDU	6 (10%)	<5*	<5*	<5*	<5*
MSM/IDU	<5*	<5*	<5*	<5*	<5*
Hemophilia/Coagulation Disorder	<5*	<5*	<5*	<5*	<5*
Heterosexual Contact	8 (13%)	<5*	5 (10%)	13 (33%)	9 (19.6%)
Transfusion/Transplant	<5 *	<5*	<5*	<5*	<5*
Mother with HIV	<5 *	<5*	<5*	<5*	<5*
No Risk Reported	23 (37%)	12 (33%)	17 (33%)	5 (13%)	11 (23.9%)
Total	62 (100%)	36 (100%)	51 (100%)	39 (100%)	46 (100%)
* Cell contains fewer than five cases.					

## **I) Pediatric HIV/AIDS Cases**

The number of pediatric HIV/AIDS cases has remained steady and low during the last five years. Almost all of the RI pediatric cases result from perinatal exposure. In 2009, the mandatory HIV testing of pregnant women, and babies with unknown maternal status during pregnancy, was added to RI General Law ([§ 23-6.3-3](#)). This policy decision has ensured earlier detection of HIV among pregnant women resulting in appropriate clinical management of the mother and the baby, thus reducing chances of vertical (mother to child) HIV transmission.

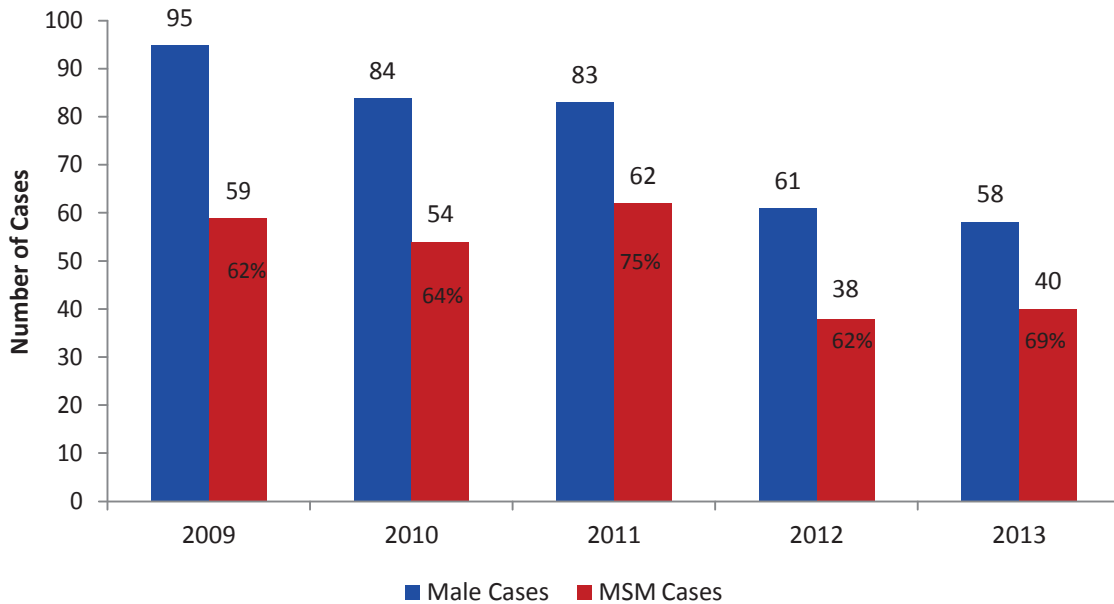
Pregnant women who test positive for HIV as well as HIV virologic testing in infants with potential perinatal exposure are reportable to the HIV Surveillance Program. The Surveillance program works closely with Rhode Island birthing hospitals to identify HIV positive pregnant women, exposed infants, and ensure they are linked to appropriate medical care.

In 2013, there were no pediatric HIV/AIDS cases identified and reported to HEALTH. From 2008 to 2012 there were 7 cases of pediatric HIV diagnosed and reported to the HIV Surveillance program. Forty three percent (n 3) of these cases were born outside of the US to an HIV infected mother who moved to RI. The age range of the 7 cases were from <1-9 years. Fifty seven percent of cases were male (n 4) and 43% were female (n 3). Seventy one percent (n 5 cases) were African American. Among these, two were diagnosed with AIDS the same year they were diagnosed with HIV.

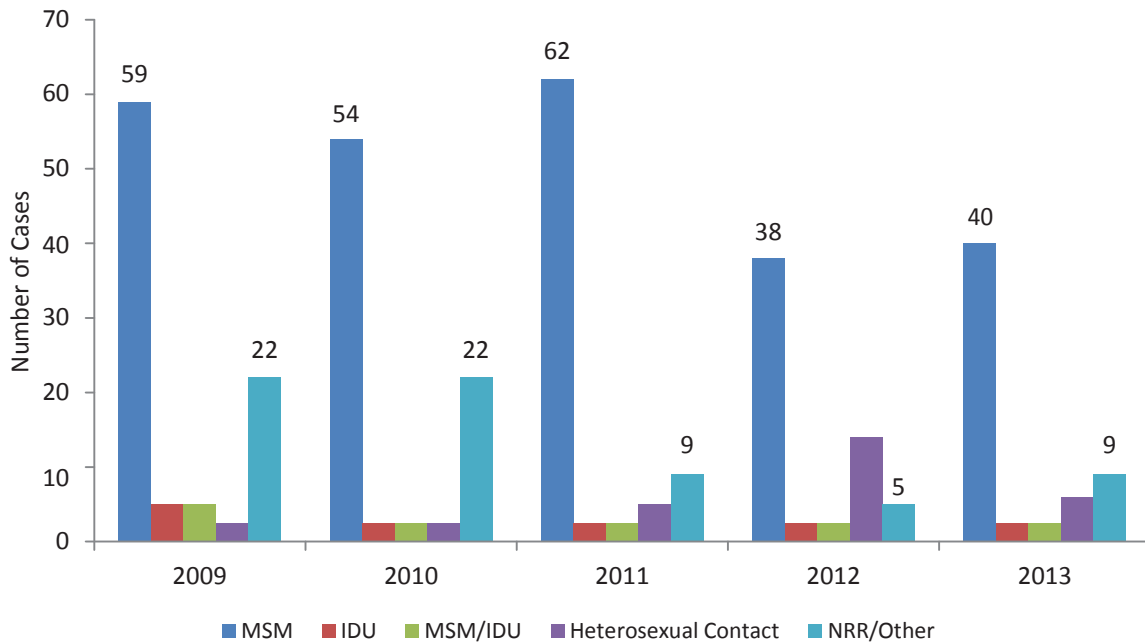
## **J) MSM, ‘Men who have sex with men’**

The MSM community continues to experience a disproportionately high burden of HIV diagnosis despite the total number of new diagnoses decreasing over the past five years. Figure 16 show the decrease in male cases over the last five years but the continued high percentage of identified cases that report being MSM. Figure 17 shows how the MSM risk group compares to other reported risk groups among the male population. Total case counts among MSM are much higher than other exposure categories.

**Figure 16. Proportion of Male HIV cases who are MSM RI, 2009-2013**

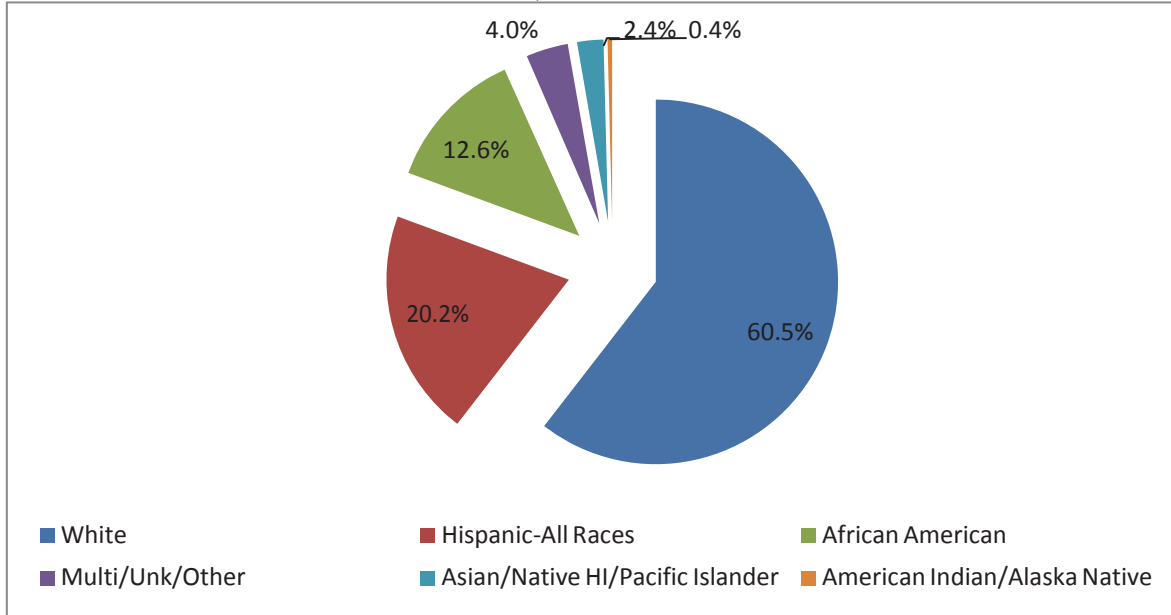


**Figure 17. Male HIV Cases by Risk Category, RI, 2009 - 2013**

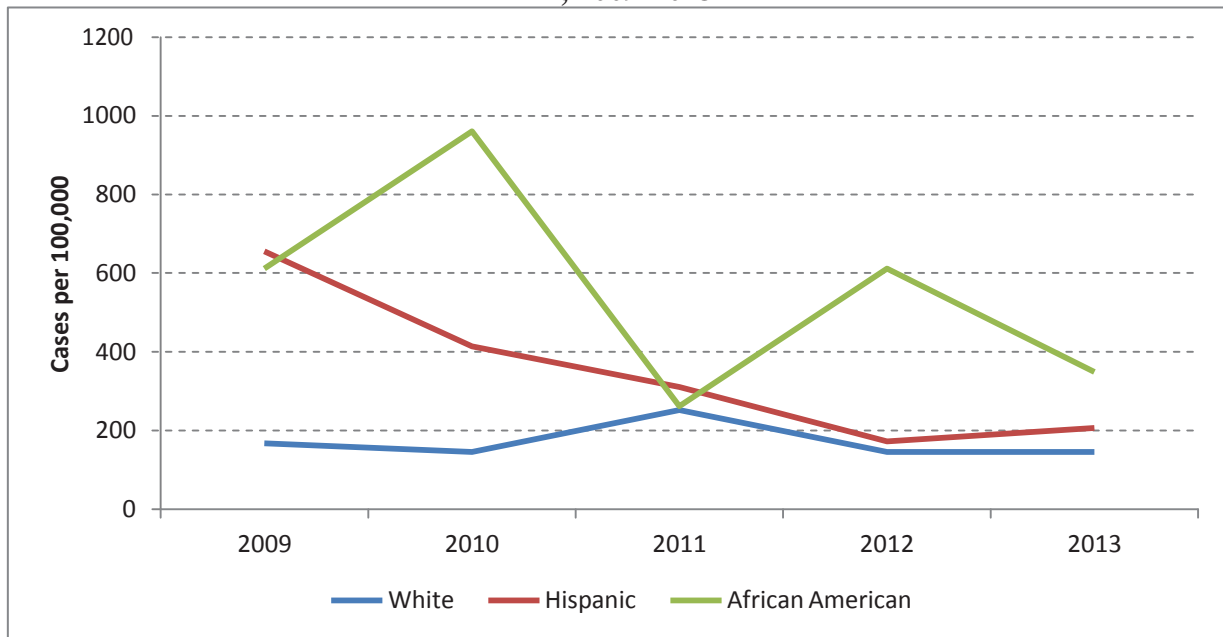


Comparing racial and ethnic groups within the MSM population, White MSM account for the largest proportion infected with HIV (61% compared to 22% in Hispanics and 10% in African Americans) (Figure 18). However, the rates of disease among African American and Hispanic populations are much higher. We have seen, however, since 2009, the large disparity in disease rates between Whites and Hispanics and Whites and African Americans has narrowed (Figure 19).

**Figure 18. MSM HIV Proportions by Race/Ethnicity, RI, 2009-2013**



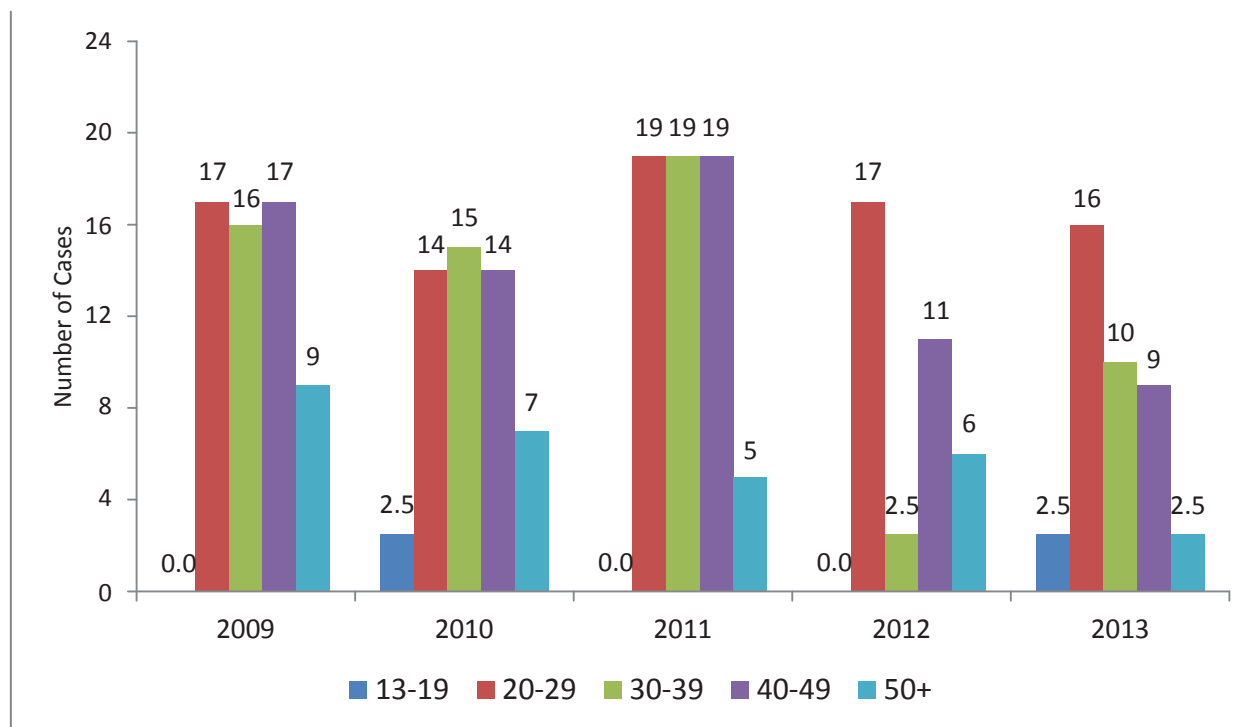
**Figure 19. MSM HIV Rates by Race/ Ethnicity, RI, 2009-2013**



This graph was developed with the assumption that MSM comprise 5% of the adult male population >14 years old in Rhode Island. 5% was determined based on results from the RI BRFSS and research conducted by [Lieb et al.](#) (citation below) estimating MSM populations by state. Rates are based on the 2010 US Census.

The age distribution of MSM infected with HIV, from 2009-2013, has changed similar to the overall HIV epidemic across Rhode Island. Newly identified cases are increasingly being seen in the younger age categories. Cases under 20 years of age remain rare. Prior to 2009, the 30-39 and 40-49 year old age category saw slightly more cases of HIV than the 20-29 year old age category. This has changed. Where we have seen a reduction in total cases among 30-39 year olds and 40-49 years olds we are not seeing as substantial a decrease in case counts among the 20-29 year old category. In the previous two years, the 20-29 age category had the largest case counts. Despite an overall reduction in cases over the last five years, the 20-29 year old age category is not seeing a similar decrease in newly identified cases.

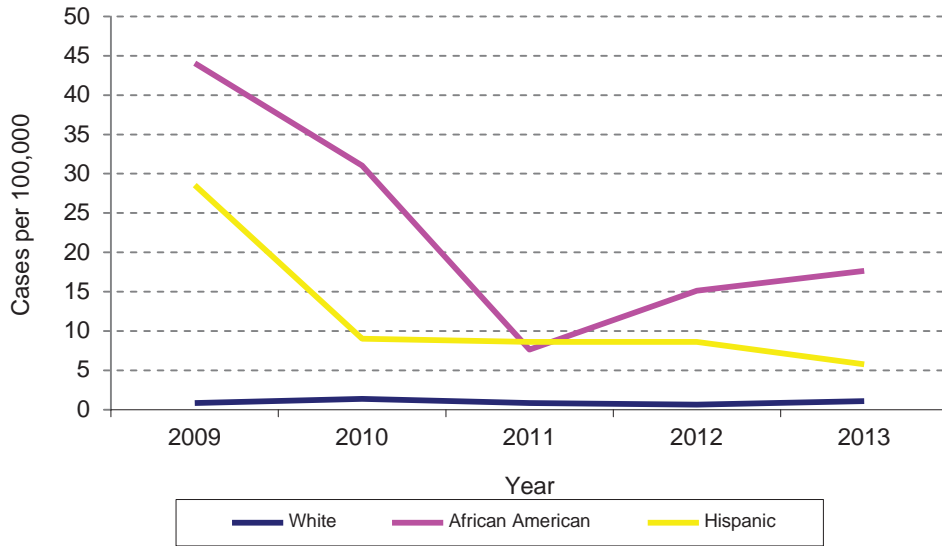
**Figure 20. Newly Identified HIV/AIDS Cases, MSM by Age, RI, 2009-2013**



### **K) Minority Women**

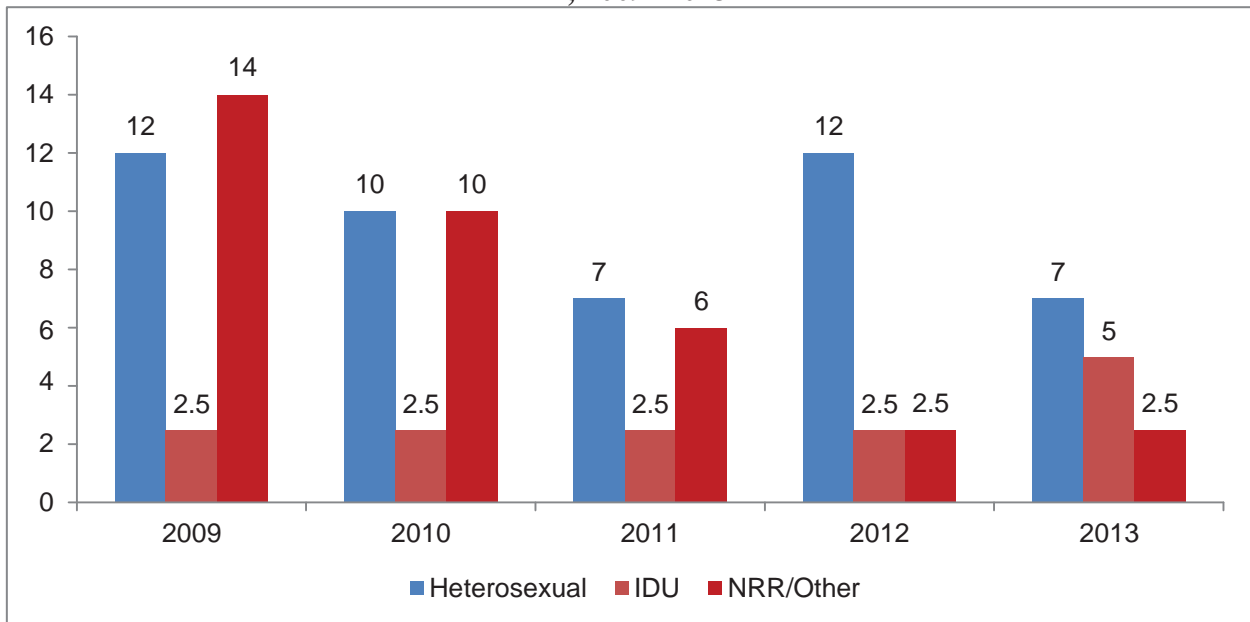
Between 2009 and 2013, 99 women were diagnosed with HIV in Rhode Island. The rate of new diagnosis among White women remained about 1 case per 100,000. For Hispanics rate of new diagnosis was 12 cases per 100,000, and for African American women it was 23 cases per 100,000. The disparity between White women and minority populations has narrowed over the past 5 years, and all groups experienced a decrease in rates of disease over this five year period. However, the rate of disease in minority populations continues to be disproportionately high (Fig 21). Figure 22 shows the number of newly identified cases among females, by reported risk factor. Heterosexual contact continues to be the most reported risk factor. In 2013, five cases reported intravenous drug use, which was the largest number of reports in one year over the last five year period. Historically, a large percentage of cases had no risk reported.

**Figure 21. Female HIV Rates by Race/Ethnicity, RI, 2009- 2013**



HIV Partner Counseling and Referral Services (PCRS) interviews with index and partner clients can illuminate nuances to the HIV epidemic. In 2013, nearly 20% of female cases reported exchanging sex for money, drugs, goods, or services ever in their life. Nearly 1/3 of cases reported the following high risk behaviors: (1) having sex while high or intoxicated, (2) having been forced to have sex involuntarily, and (3) having ever been incarcerated in their life. The PCRS interview process has allowed the HIV Surveillance program to better understand the subset of risks among the broader risk categories (ex. Heterosexual).

**Figure 22. Female HIV cases by Risk Factor, RI, 2009- 2013**





## L) Persons Unaware of their HIV Status

**Table 6. Characteristics of Individuals Diagnosed with HIV alone and Individuals diagnosed with HIV presenting with AIDS RI 2009 to 2013**

The Centers for Disease Control and Prevention (CDC) estimates that 18% of those infected with HIV are unaware of their status based on the national data reported through 2010. Local estimates of people infected with HIV who are unaware about their status will vary from the national estimate as states differ in their population dynamics and risk behavior. Local estimates are not available currently through the CDC, and they recommend not applying the national estimate locally. Alternatively, another way to estimate this population is to see how many cases have already progressed to AIDS at the time of first HIV diagnosis. Individuals who are diagnosed with AIDS at the same time as being diagnosed with HIV are considered late diagnoses. These cases may be representative of the population that is infected but unaware of their status. Therefore, the number of HIV diagnoses with concurrent AIDS diagnoses is a useful metric for estimating the population of HIV infected individuals who are unaware of their status. There are several reasons why people may not know their HIV status. Some people do not seek regular medical care, others do not believe that they are at risk, and others may deny they have HIV despite preliminary test results. We have examined the HIV cases reported in the past five years and identified those who were also diagnosed with AIDS at that time to give us an idea on the demographics of those who were unaware about their status. From 2009-2013, 136 individuals became aware of their positive HIV status when diagnosed concurrently with AIDS

<b>Demographic Characteristics</b>	<b>Individuals Diagnosed with HIV alone 2009-2013</b>	<b>Individuals Diagnosed with HIV presenting with AIDS 2009-2013</b>
<b>Gender</b>		
Male	268 (77.9%)	113 (83.1%)
Female	76 (22.1%)	23 (16.9%)
Total	344 (100%)	136 (100%)
<b>Age Group</b>		
<13	<5*	<5*
13-19	9 (2.6%)	<5*
20-29	101 (29.4%)	22 (16.2%)
30-39	90 (26.2%)	35 (25.7%)
40-49	84 (24.4%)	44 (32.4%)
50+	59 (17.2%)	33 (24.5%)
Total	344 (100%)	136 (100%)
<b>Race/Ethnicity</b>		
White	155 (45.1%)	64 (47.1%)
African American	76 (22.1%)	27 (19.9%)
Hispanic	93 (27.0%)	41 (30.1%)
Asian/HI		
Native/ Pacific Islander	5 (1.5%)	<5*
Native American / AK	<5*	<5*
Native Multi/Other	14 (4.1%)	<5*
Total	344 (100%)	136 (100%)
<b>Risk Factor</b>		
MSM	192 (55.8%)	61 (44.9%)
IDU	20 (5.8%)	6 (4.4%)
MSM / IDU	7 (2.0%)	5 (3.7%)
Heterosexual Contact	53 (15.4%)	28 (20.6%)
Transfusion	<5*	<5*
No Risk Specified	34 34 (9.9%)	34 (25.0%)
Mother with HIV/HIV risk	<5*	<5*
Total	344 (100%)	136 (100%)

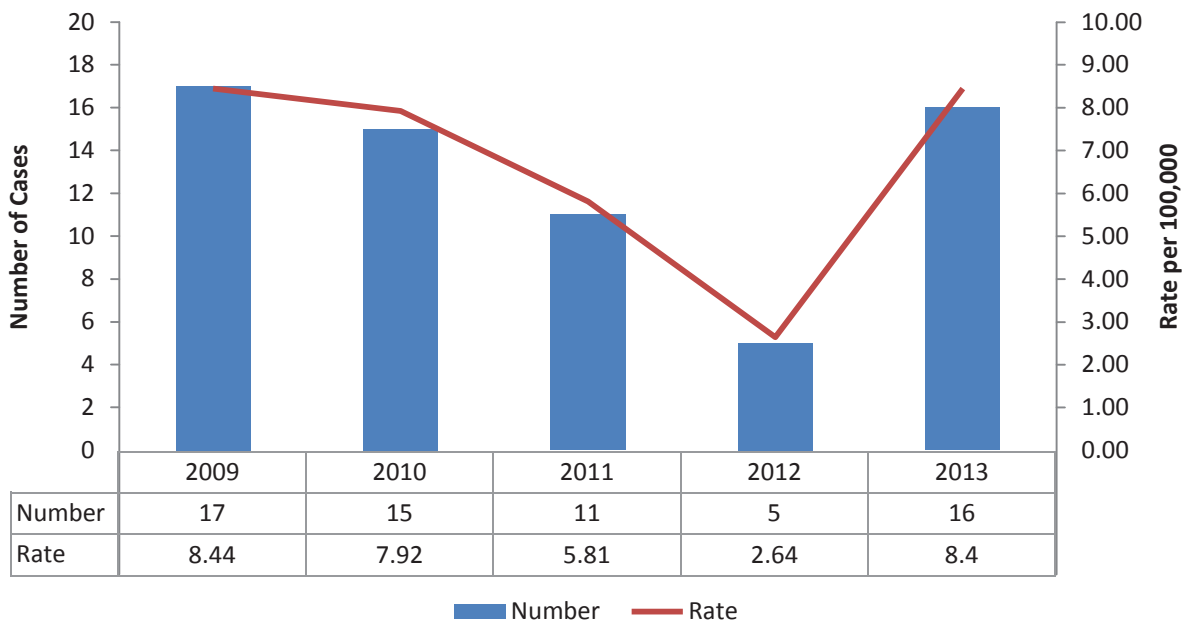
\* Cell contained less than five cases

during the period from 2009-2013, which is 28.3% of the total of 480 individuals who were diagnosed with HIV during the same time period. Roughly 17% of the individuals who became aware of their HIV status when diagnosed with AIDS were females and 83% were males. The percentage of males increased during this five year period compared to the cases from 2000-2011 (74%). The majority of those who become aware of their HIV status when diagnosed with AIDS were White (47%), followed by Hispanics (30%), and African Americans (19.9%). The primary risk factor among those who become aware of their HIV status when diagnosed with AIDS is MSM (44.9%), followed by No Specified Risk (25%), and heterosexual contact (20.6%) (Table 6).

### M) Youth

Persons aged from 13 to 24 years of age at the time of HIV diagnosis are defined as HIV youth cases. About 13% (64 out of 480) of all the HIV cases diagnosed in Rhode Island in the last five years were 13-24 years of age. Since 2009, the numbers have steadily declined to a low of five cases in 2012. However, in 2013 there was an increase to 16 cases, similar to years prior to 2012. The majority of cases in 2013 were between 20 and 24 years old, emphasizing the increased burden of disease on that age group. Cases continue to be mostly males and the majority of cases report MSM as their risk.

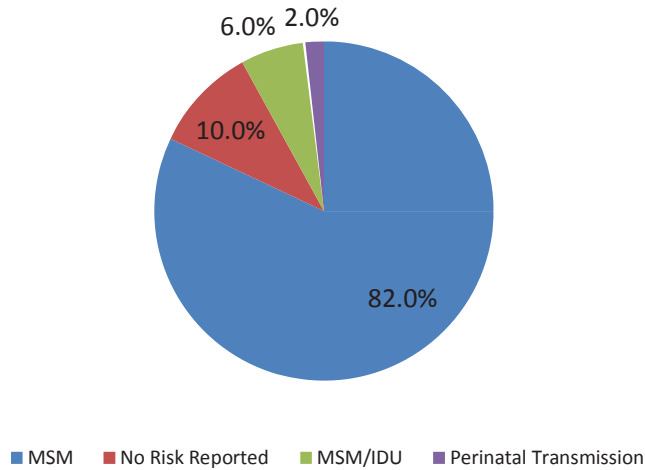
**Figure 23. HIV Cases among Youth (13-24 years old), RI, 2009-2013**



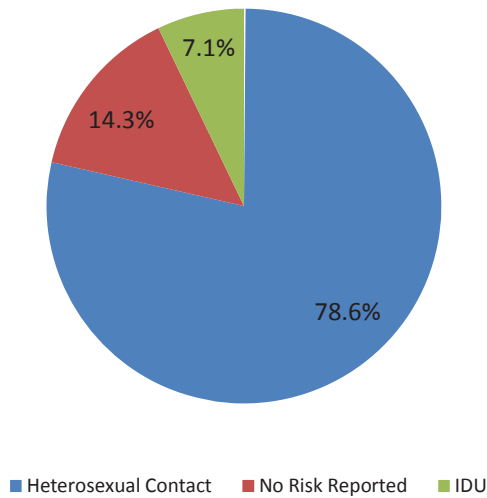
Of the 64 cases diagnosed among youth during 2009-2013, 50 were males and 14 were females. Youth of racial and ethnic minorities were heavily impacted with 23.4% HIV cases occurring in Hispanic youth and 18.8% occurring in African American/Black youth. Fifty percent of cases were in White youth. Given the population sizes, the large percentage of Hispanic and African American cases shows a disparity in burden of disease among these populations.

Among male youth, men who have sex with men (82%) was the most commonly reported risk category. Among female youth, heterosexual contact (78.6%) was the most commonly reported risk category followed by no reported risk (14.3%). Figures 24 and 25 illustrate these findings.

**Figure 24. Male Youth HIV Cases by Risk Factor, RI, 2009-2013**



**Figure 25. Female Youth HIV Cases by Risk Factor, RI, 2009-2013**



## **4.) Surrogate Data in Rhode Island**

### **A) Rhode Island STD Epidemiology, 2013**

In 2013, reports of chlamydia, gonorrhea, infectious syphilis, and late syphilis increased when compared to 2012. There were no congenital syphilis cases reported in 2013.

#### **Syphilis**

In 2010, Rhode Island, like many other parts of the country, experienced a significant increase in the reports of infectious syphilis (primary, secondary, and early latent stages), with reports escalating from 34 cases in 2009 to 61 cases in 2010. Since then however, reports have remained fairly stable. There were 67 cases reported in 2013 compared to 68 cases reported in 2011. Cases reported in 2013 are distributed throughout the state with most among residents of Providence County (81%) and Kent County (7%). This is similar to 2012 when 81% of infectious syphilis cases were among Providence County residents. HEALTH's STD Program staff continue to attempt to interview for each case despite county of residence.

While non-Hispanic White males continue to account for the majority (58%) of infectious syphilis cases in Rhode Island, rates remain highest for non-Hispanic black males with 25 cases per 100,000 population reported in 2013.

Sixty-four of the 67 (96%) infectious syphilis cases reported in 2013 were male, of which 52 (81%) were men who have sex with men (MSM). Of the 52 MSM, 23 (44%) self-reported as HIV-positive. Unlike gonorrhea and chlamydia, where infection is concentrated in the 15-24 year old population, this age group represents only 18% of the cases of infectious syphilis reported in Rhode Island. Infectious syphilis cases reported in 2013 had an average age of 32.5 years, with individuals older than 30 years of age accounting for 67% of reported cases.

#### **Chlamydia**

Reports of chlamydia in Rhode Island remain high. In 2013, there were 4,312 cases of chlamydia, remaining stable compared to the 4,313 cases reported in 2012. Reported cases of chlamydia remain concentrated in Providence County, which represents 79% of cases reported state-wide in 2013, remaining stable from the reported 78% in 2012. The City of Providence accounted for 37% of chlamydia cases reported throughout the state, which is comparable to 38% of cases observed in the city in 2012.

There was no change in the distribution of chlamydia cases by sex when comparing the 2012 to 2013. In both time frames, males accounted for 29% of reported chlamydia cases (1222 male cases in 2012 and 1267 male cases in 2013), while females accounted for the majority (71%) of reported chlamydia cases (3091 cases in 2012 and 3045 cases in 2013). Individuals age 15-24 continue to represent nearly two-thirds of chlamydia cases in Rhode Island, and 94% of all cases are less than 35 years of age. This trend held steady from 2012 to 2013.

Race/ethnicity distribution of chlamydia cases in 2013 remained consistent with data seen during the previous five years. Non-Hispanic Whites accounted for 31% of reported cases, followed by Hispanics (26%) and Non-Hispanics Blacks (13%). In 2013, 29% of the cases were

missing race and ethnicity data, which was an increase over the 19% of cases in 2012 that were missing this data. Race/ethnicity percentages reported in this section are estimated to adjust for unknown and missing data; assuming there is no bias in the reporting of cases for which race/ethnicity are known.

From 2008 to 2012, surveillance data has shown that, on average 6% of males diagnosed with chlamydia each year are MSM. Data from 2013 shows that approximately 5% of male chlamydia cases were MSM. When reviewing these percentages it is important to note that, since the HEALTH STD Program does not routinely perform follow-up for chlamydia cases, data on sexual orientation of chlamydia cases is extremely limited and ascertained only from STD Case Report Forms (CRFs) filled out by the provider rather than through interviews with STD Program staff as is standard for gonorrhea and infectious syphilis cases.

### **Gonorrhea**

Reports of gonorrhea in Rhode Island decreased in 2013 by 10% from 507 cases in 2012 to 454 cases in 2013.

In 2013, when looking at race/ethnicity, the highest percent of cases was reported in non-Hispanic Whites (35%), followed by Hispanics (22%) and non-Hispanic black (21%). Since 2009, case rates have consistently been higher in non-Hispanic blacks than other race/ethnic groups (242.4 cases per 100,000 in 2013).

Geographically, Providence County continues to account for the largest proportion of reported cases. From 2009-2012, an average of 88% of reported cases resided in Providence County. Cases reported in the 2013 have held to this trend with 86% of cases reported among Providence County residents. By city, trends are also stable, with 43% of cases residing in the City of Providence.

As previously mentioned, reports of gonorrhea in Rhode Island began to increase in 2011, jumping 24% from the 291 cases reported in 2010 to the 360 reported in 2011. Numbers rose another 40% from 2011 to 2012, with reports totaling at 507 cases, and have since decreased in 2013 to 454 cases. This decrease was not equal among both males and females, with a 4% decrease in male cases and an 18% decrease in female cases observed from 2012 to 2013. Overall, males accounted for 60% of cases, and 40% were females. Age distribution among males in 2013 was similar to previous years, with 43% of cases among males 20-29 years old. Among females, however, age distribution has changed slightly. In 2013, females ages 15-24 accounted for 63% of female gonorrhea cases, which is comparable to the 65% seen among females of this age in 2012. Cases in females in the 25-29 years of age group, which had previously increased from 10% of female cases in 2011 to 19% in 2012, increased slightly to 21% in 2013.

From 2006 to 2012, surveillance data has shown that on average, 30% of males diagnosed with gonorrhea are MSM. In 2013, the percentage increased, with 37% of male gonorrhea cases identifying as MSM. It is important to note that 199 of 263 male cases (76%) were interviewed and sexual orientation information is not available on the remaining 64 cases.

The STD Program has investigated the possibility that the rising number of gonorrhea cases in Rhode Island may be associated with the closing of the state-funded Whitmarsh STD Clinic on July 1, 2011. Initial review of data post-clinic closure has shown an increase in reports from ER/urgent care facilities, private physicians, and health centers, as well as Planned

Parthenood of Southern New England (PPSNE), Providence. These findings may underscore that efforts to transition STD services from the Whitmarsh to PPSNE and other health centers were successful. Moreover, the push from the HEALTH STD Program to make the public aware of the clinic closure and the availability of alternate services when Whitmarsh closed, may have led to increased screening and case finding.

**STD/HIV Co-infection**

In order to estimate STD/HIV co-infection in Rhode Island, gonorrhea and infectious syphilis cases reported to the STD Program are cross-matched with HIV surveillance data on a yearly basis. On average, 4% of gonorrhea cases and 36% of infectious syphilis cases reported each year are confirmed co-infections based on cross-match of the HIV and STD surveillance data. See the table below for more detail.

**Table 7: STD/HIV Co-infections, Rhode Island, 2010-2013**

Category	2010	2011	2012	2013
% of Gonorrhea cases co-infected with HIV	4.5%	3.9%	3.9%	4.8%
% of infectious syphilis cases co-infected with HIV	36.7%	33.8%	36.7%	33.8%

**STD Surveillance Risk Factor Data**

In 2014, the STD Program completed an analysis of risk factor data for STD cases reported in 2013. This analysis was completed for infectious syphilis and gonorrhea cases reported in 2013 that were interviewed by STD Program staff. Percentages are calculated based on the number of cases interviewed rather than the number of cases reported. In 2013, 47 of 67 (70%) reported infectious syphilis cases were interviewed, and 340 of 454 (75%) reported gonorrhea cases were interviewed.

*Infectious Syphilis:* Among all infectious syphilis cases, anonymous sex was the most commonly identified risk with 60% of interviewed cases indicating that they had engaged in the behavior. Sex while high (31%) and a history of non-injecting drug use (25%) were also commonly reported by infectious syphilis cases. Of individuals reporting use of non-injecting drugs, the majority (87%) identified marijuana as their drug of use. Other drugs included cocaine, crystal meth, and crack. When reviewing this data it is important to note that MSM accounted for 78% of infectious syphilis cases reported in 2013.

- MSM syphilis cases most commonly reported anonymous sex (69%), followed by non- injecting drug use (31%) and sex while high (29%).

*Gonorrhea:* Stratification of the risk factor data on gonorrhea cases by risk groups revealed

that 3 main risk factors (anonymous sex, sex while high, and non-injecting drug use) are common in each of these populations.

- Female gonorrhea risk factors most commonly reported were sex while high (20%) and anonymous sex (15%).
- MSM gonorrhea cases most commonly reported anonymous sex (64%), followed by sex while high (28%) and non-injecting drug use (12%).
- Heterosexual males reported non-injecting drug use (44%) and anonymous sex (49%). Of note, 25% of heterosexual male gonorrhea cases reported they had been incarcerated compared to 8% of females and 7% of MSM.
- For all groups, those that reported non-injecting drug use most commonly identified marijuana as the drug of choice. Other drugs included crack, cocaine, and crystal meth.

## **B) Integrated HIV/Viral Hepatitis Counseling, Testing, Referral (CTR) and Immunization Services**

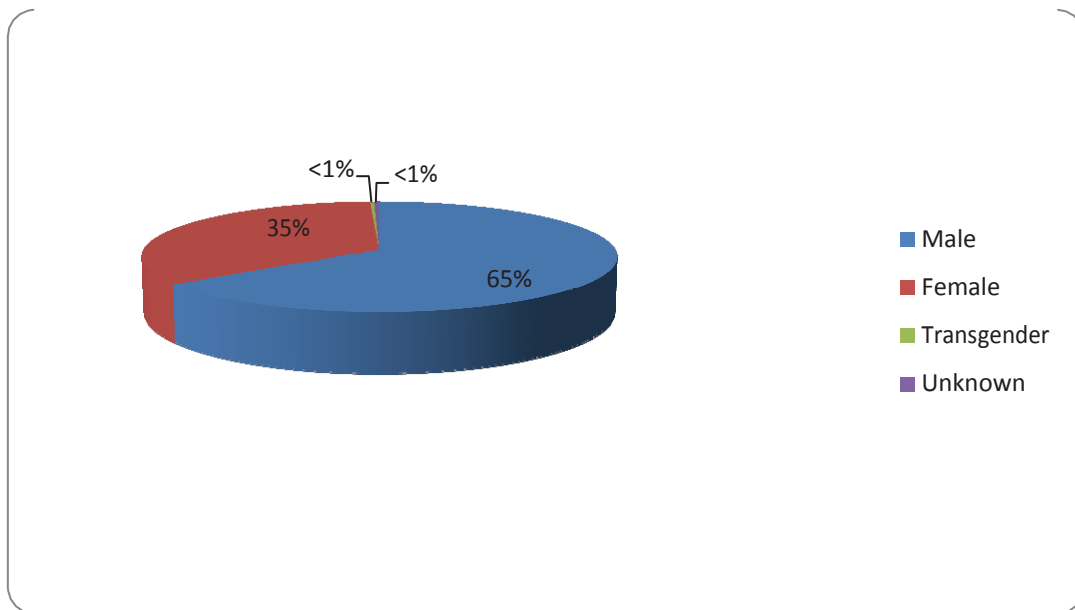
Publicly funded counseling and testing services provided by (HEALTH) in collaboration with the CDC were initiated in 1985 to provide alternatives to blood donation as a means for high-risk persons to determine their HIV status. These services became an integral part of the HIV prevention program and continue today. The Integrated HIV/Viral Hepatitis Counseling, Testing, and Referral System (CTR) provide free confidential/anonymous voluntary HIV counseling, testing, and referral services as well as Hepatitis B testing, Hepatitis C testing, and immunization against Hepatitis A and B (Twinrix®). HEALTH's CTR system works with seven funded agencies (AIDS Care Ocean State, AIDS Project Rhode Island, MAP Behavioral Healthcare, The Miriam Hospital, Project Renew, Project Weber, and Sojourner House) to provide prevention services throughout the state. In addition to these agencies, HIV counseling and testing is offered through HEALTH's Partner Services program. All staff associated with the CTR program must participate in Integrated Communicable Diseases 101 (ICD 101) and demonstrate sufficient knowledge of HIV, STDs, and viral hepatitis so as to educate and counsel clients. Additionally, staff conducting HIV or viral hepatitis testing are required to achieve certification as a Qualified Professional Test Counselor (QPTC) prior to conducting testing. Our CTR system is funded by state and federal dollars.

In 2013, the CTR system provided 4,181 HIV tests across 44 fixed and mobile sites (Table 8). Thirty-two tests were preliminary positive, and eleven were confirmed to be HIV-positive (positive test rate=0.26%). Of the eleven clients who tested positive, ten were linked to care and confirmed to have attended their first appointment; one client was lost to follow up. Most tests (99 percent) were conducted using OraSure OraQuick *ADVANCE*® Rapid HIV 1-2 Antibody test technology. Among all individuals utilizing the CTR program for HIV testing, 35% were female, 30% were Hispanic/Latino, 44% were white, 15% were black, and 36% were between the ages of 20 and 29. High risk heterosexual contact (46%) and MSM (29%) represented the largest percentage of risk groups tested. Injection drug use was reported by 4 percent of individuals. Thirteen percent reported other risks that prompted HIV testing (e.g. low-risk heterosexual contact or women who have sex with women).

Three funded sites (AIDS Care Ocean State, MAP Behavioral Health, and The Miriam Hospital) also provided Hepatitis B and C testing and Hepatitis A & B vaccination (Twinrix®). From 2012 to 2013 CTR sites increased the percentage of racial/ethnic

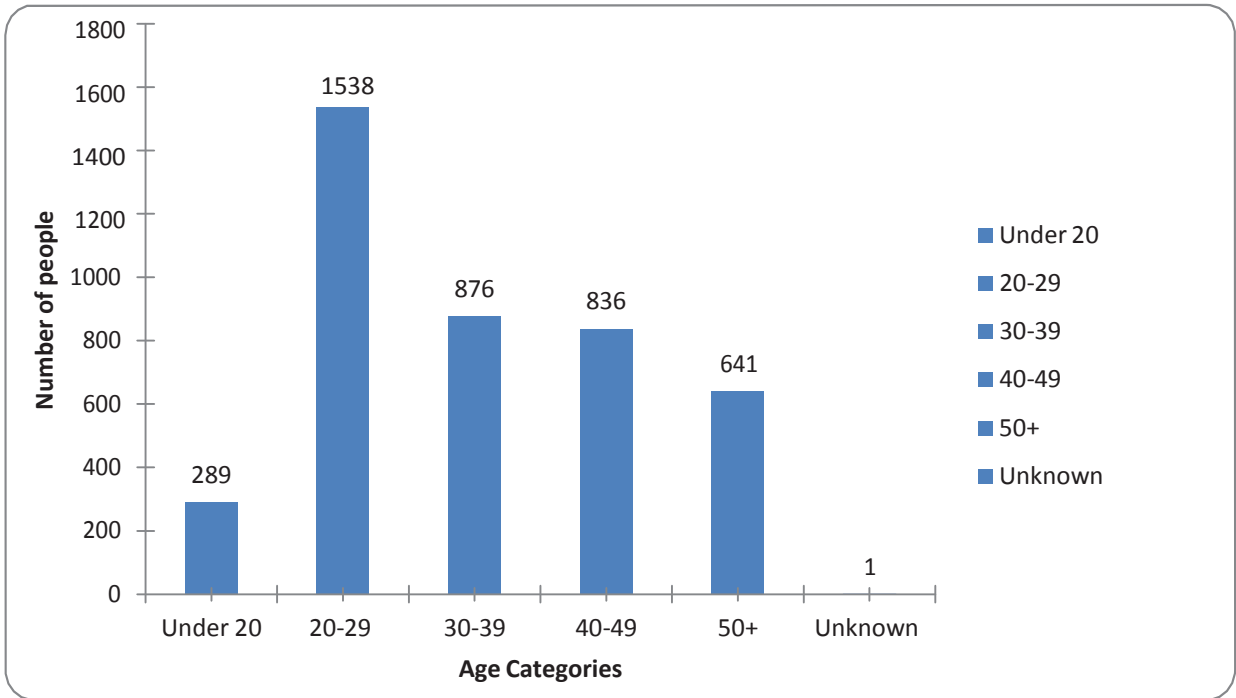
minorities tested for HIV, increased the percentage of 20-29 year olds tested, and increased the percentage of MSM tested, all positive signs in the CTR Program's ability to target tested to the highest risk populations. In 2013, the funded sites provided 20 Hepatitis B tests (0 positives identified), 2,207 Hepatitis C tests (86 positives identified), and 623 doses of Twinrix®. Of all clients who elected Hepatitis B testing, 60% were male, 30% were 20-29 years old, 30% were Hispanic/Latino, 55% were white, and 15% were Black/African American. Of the clients who elected Hepatitis C testing, 61% were male, 32% were between the ages of 20 and 29, 22% were between the ages of 30 and 39, 39% were Hispanic/Latino, 37% were white, and 20% were black. When asked about their risks for Hepatitis C, the most frequently reported risk factor was sex with multiple partners (66%), followed by unprotected vaginal or anal sex (58%), tattoos and body piercings (47%). Nine percent of clients reported injection drug use as their risk factor. Finally, 251 clients received their first dose of Twinrix® (the remaining 372 doses were follow-up doses). Of these clients who were vaccinated, 38% were male, 22% were between of the ages of 30 and 39, 58% were Hispanic/Latino, 9% were white, and 17 percent were Black/African American.

**Figure 26. Distribution of HIV CTR Clients by Gender, RI, 2013**

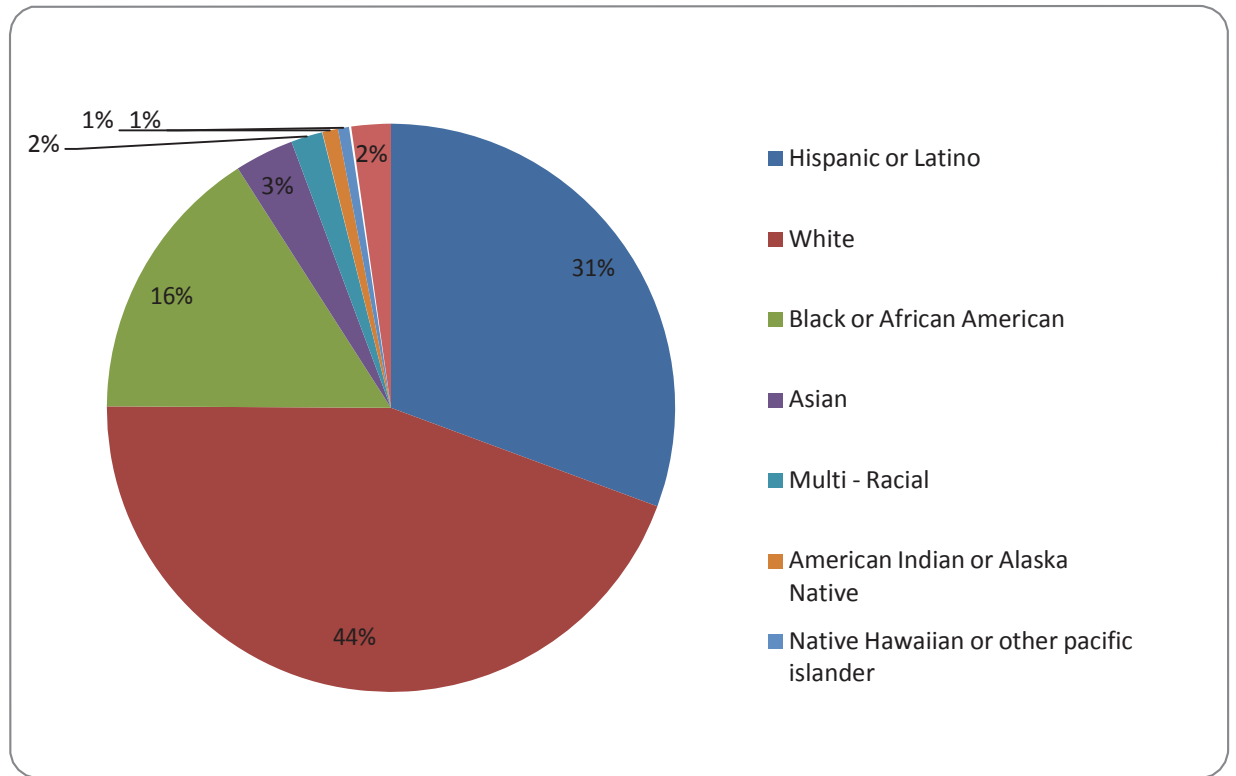




**Figure 27. Distribution of HIV CTR Clients by Age Category, RI, 2013**



**Figure 28. Distribution of HIV CTR Clients by Race/Ethnicity, RI, 2013**



***AIDS Project Rhode Island:*** AIDS Project Rhode Island, an AIDS service organization in Providence, conducted 926 HIV tests at 18 satellite sites. Sites included eleven colleges, one bathhouse, three community-based organizations, and the AIDS Project Rhode Island main office. The majority of individuals who received an HIV test were male (68%), and 64% were white. The 20-29 year old age category represented the largest age category tested (46%) followed by individuals aged 40-49 (13%). Roughly half of individuals tested at APRI sites were MSM (46%).

***AIDS Care Ocean State:*** AIDS Care Ocean State, an AIDS service organization located in Providence, conducted 1,238 tests at eleven satellite sites. Sites included one bathhouse, one college, six community organizations, mobile sites in Newport, Woonsocket, and Pawtucket/Central Falls, and AIDS Care Ocean State's Broad Street location. The majority of individuals who received an HIV test were male (64%) and 53% were white. Most tests were conducted among 20-29 year olds. The most reported risk groups were high-risk heterosexual contact (44%) and MSM (29%).

***MAP Behavioral Health:*** MAP Behavioral Health, an addiction treatment program in Providence, conducted 822 tests at six sites. Sites included one middle school, one church, one clinic (Hope Clinic/Clinic Esperanza), three community organizations, including Progreso Latino, and two MAP Behavioral Health locations. More than half of the individuals that utilized CTR services were of Hispanic/Latino origin (62%) and 55% were male. Adults aged 40-49 represented the largest age category tested (35%). The largest risk category was high-risk heterosexual contact (75%).

***The Miriam Hospital:*** The Miriam Hospital, located in Providence, conducted 1,062 tests at two sites. Sites included the Immunology Center clinic and Community Access (an overdose prevention project serving injecting drug users). The majority of individuals tested were male (72%) and 43% of all tested individuals were white. Adults aged 30-39 represented the largest age category. Over half (53%) of individuals tested reported high-risk heterosexual contact as their risk, 22% were MSM and 13% were reported as low-risk heterosexual contact risk category.

***Project Weber:*** Project Weber, our newest CTR site, is a non-profit organization committed to providing HIV prevention testing and other health and wellbeing services to male sex workers in Providence, RI. This new site conducted 47 HIV rapid tests in 2013. The majority of individuals that received testing from Project Weber were within the 20-29 age range (46%), were White (55%) and report MSM as their main risk (44%), followed by the MSM/IDU risk category (44 percent).

***HEALTH Partner Services:*** HEALTH's Partner Services staff conducted 73 tests across the state, reaching partners of newly diagnosed HIV-positive individuals. The majority of individuals tested were male (73%) and 72% were white. The largest age category tested was the 20-29 year old category (53%). MSM risk was reported in 53% of those tested and 39% were reported as high-risk heterosexual contact.

**Table 8. HIV Counseling, Testing, and Referral Site Client Characteristics, RI, 2013**

	Total	AIDS Project Rhode Island	AIDS Care Ocean State	MAP Behavioral Health Care	The Miriam Hospital	Project Weber	HEALTH Partner Services
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
<b>Tests</b>							
Number of Tests	4181 (100%)	926 (22%)	1238 (30%)	822 (20%)	1062 (25%)	47 (1%)	73 (3%)
<b>Gender</b>							
Male	2714 (64%)	628 (68%)	797 (64%)	401 (51%)	775 (72%)	47 (100%)	53 (73%)
Female	1438 (34%)	289 (31%)	429 (35%)	416 (49%)	284 (26%)	0(0%)	20 (27%)
Transgender (M to F)	10 (<1%)	<5 (<1%)	3 (<1%)	5 (<1%)	1(<1%)	0(0%)	0(0%)
Transgender (F to M)	3 (<1%)	<5 (<1%)	2 (<1%)	0 (0%)	0(0%)	0(0%)	0(0%)
Unknown	16(<1%)	7 (1%)	7 (<1%)	0 (0%)	1(<1%)	0(0%)	0(0%)
Total	4181 (100%)	926 (100%)	1238 (100%)	822 (100%)	1061 (99%)	47 (100%)	73 (100%)
<b>Ethnicity</b>							
Hispanic or	1281 (30%)	151 (16%)	301 (24%)	514 (62%)	295 (27%)	5(11%)	13 (18%)
<b>Race</b>							
American Indian/Alaskan Native	38(1%)	6(<1%)	5 (.4)	13 (1%)	8(<1%)	5(11%)	0 (0%)
Asian	141 (3%)	49(5%)	23 (2%)	39 (4%)	28 (2%)	1(2%)	1 (1%)
Black/African American	663 (15%)	93 (10%)	206 (17%)	164 (20%)	183 (17%)	9(19%)	6 (9%)
Native Hawaiian/Other Pacific Islander	26 (<1%)	1 (<1%)	8 (1%)	12(1%)	4(<1%)	1(2%)	0 (0%)
White	1858 (44%)	590 (64%)	653 (53%)	69 (8%)	459 (43%)	26(55%)	53 (72%)
Multi-Racial	75 (1%)	24 (3%)	22 (2%)	0(0%)	29(2%)	0(0%)	0 (0%)
Unknown	99 (2%)	12 (1%)	20 (1%)	11(1%)	56(5%)	0(0%)	0 (0%)
Total	4181 (100%)	926 (100%)	1238 (100%)	822 (98%)	1062 (98%)	47 (100%)	73 (100%)
<b>Age</b>							
Age <13	1(<1%)	<5(0%)	<5(0%)	<5(0%)	1(<1%)	<5(0%)	<5 (0%)
Age 13-19	288 (6%)	144 (16%)	58(5%)	20 (2%)	61(5%)	2(5%)	3(4%)
Age 20-29	1538 (36%)	432 (46%)	401(32%)	151 (18%)	485 (45%)	22(46%)	39 (53%)
Age 30-39	876 (21%)	112 (12%)	307(25%)	166 (20%)	254 (23%)	17(36%)	16 (22%)
Age 40-49	836 (20%)	122 (13%)	260(21%)	294 (35%)	145 (14%)	5(10%)	10 (14%)
Age 50+	641 (16%)	115 (12%)	212(17%)	191 (23%)	116 (11%)	1(3%)	5 (6%)
Total	4181 (100%)	926 (100%)	1238 (100%)	822 (100%)	1062 (99%)	47 (100%)	73 (100%)
<b>Risk Category</b>							
High Risk Heterosexual	1953 (46%)	182 (20%)	550 (44%)	618 (75%)	570 (53%)	2(5%)	29 (40%)
Low Risk Heterosexual	527 (12%)	232 (25%)	137 (11%)	5(<1%)	144 (13%)	1(2%)	4 (5%)
IDU	187 (4%)	3 (<1%)	114(9%)	19 (2%)	42 (4%)	1(2%)	1 (1%)
MSM	1232 (29%)	429 (46%)	357(28%)	150 (18%)	236 (22%)	21(44%)	39 (53%)
MSM-IDU	52 (1%)	2 (<1%)	7(<1%)	10 (1%)	12 (1%)	21(44%)	0 (0%)
Other	63 (2%)	12 (1%)	25 (3%)	20 (2%)	6 (<1%)	0(0%)	0 (0%)
Unknown	167 (5%)	66 (7%)	48(4%)	0(0%)	52 (5%)	1(2%)	0 (0%)
Total	4181 (100%)	926 (100%)	1238 (100%)	822 (100%)	1062 (100%)	47 (99%)	73 (100%)

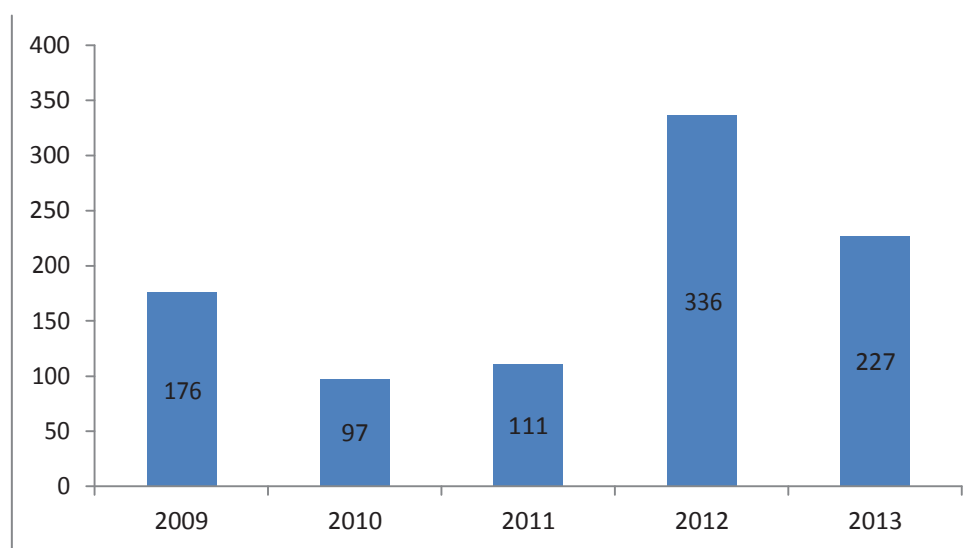
### C.) ENCORE: Rhode Island's Needle Exchange Program

ENCORE (Education, Needle Exchange, Counseling, Outreach and Referral) is an anonymous and confidential harm reduction program, coordinated by the Office of HIV/AIDS & Viral Hepatitis in Rhode Island since April 1995. The purpose of the needle exchange program is to prevent HIV transmission by giving injection drug users the tools (such as new syringes, bleach, clean cotton, alcohol swabs, condoms, information on skin care, and counseling and/or referrals) to protect themselves from acquiring blood borne pathogens from contaminated needles and other drug paraphernalia.

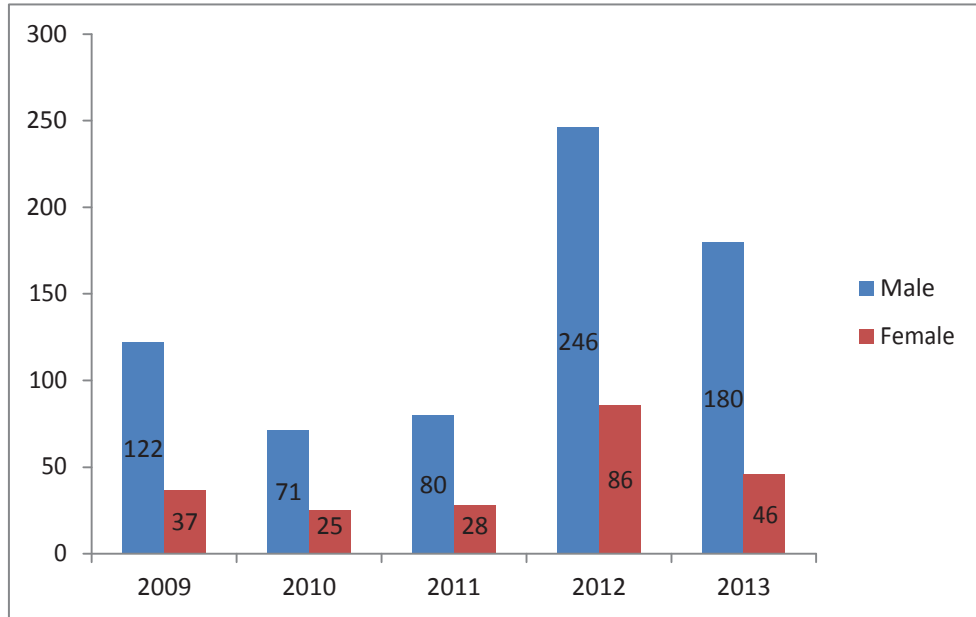
The information provided in the mandatory enrollment interview is helpful in identifying the risk behaviors of a current IDU sample in Rhode Island (see Table 9). In 2013, ENCORE enrolled 227 new clients. ENCORE program activities occurred across eleven sites in Providence, Central Falls, Woonsocket, and Newport. In 2013, over 28,000 used syringes were turned in to the ENCORE program, and more than 80,000 new syringes were distributed.

Of new clients, the majority were male (73%) and white (63%). Adults aged 30-39 represented the largest age category (38%). Forty-six percent reported they were homeless. Most (76%) had been in a drug treatment program at some point in their lifetime. When asked about their primary injecting drug, 89% reported heroin and 14% reported cocaine/crack. Risk for HIV and viral hepatitis varied among new enrollees. For example, most clients (74%) reported they did not share a syringe/works in the past 7 days. More enrollees reported using condoms (56%) than not using condoms (40%), although 73% of people who used condoms did not use them consistently. About half (51%) of new enrollees self-reported themselves to be infected with Hepatitis C, and 11% self-reported themselves to be HIV-positive. Of new clients who were asked if they would want to be tested for Hepatitis or HIV, most (76%) declined. The following figures on the next page present number and demographic characteristics of the ENCORE enrollees.

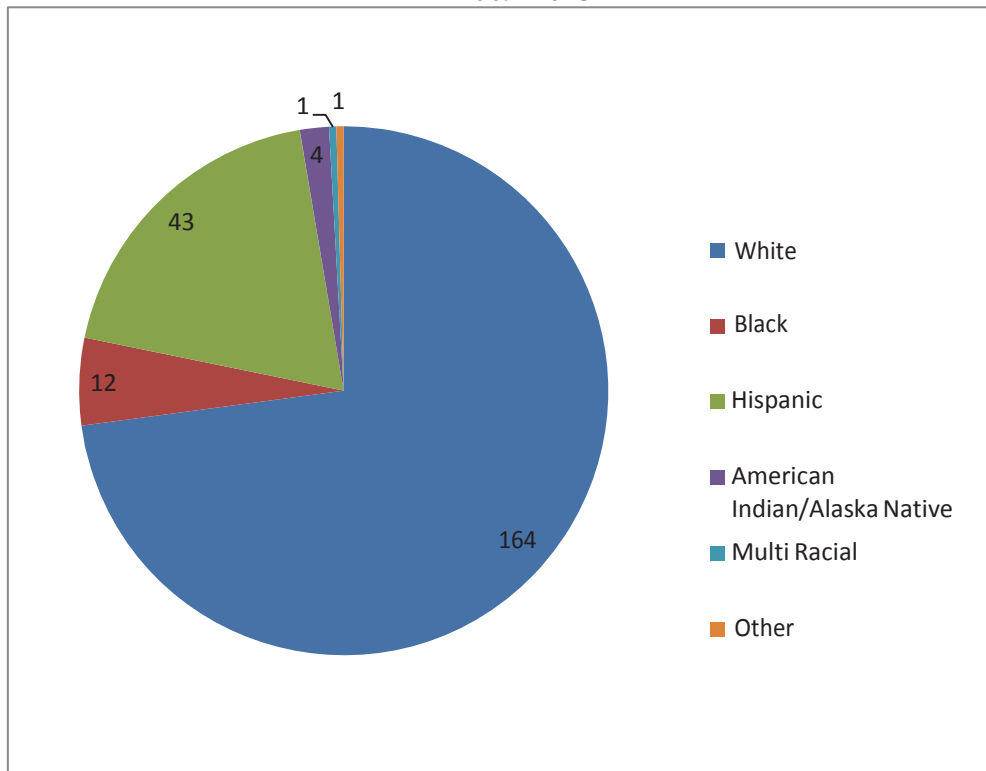
**Figure 29: Enrollment of New Clients to ENCORE, RI, 2009-2013**



**Figure 30: Enrollment of New Clients to ENCORE by Gender, RI, 2009-2013**



**Figure 32: New ENCORE Enrollment by Race/Ethnicity RI 2009-2013**



**Table 9. ENCORE New Client Enrollment Characteristics, RI, 2013**

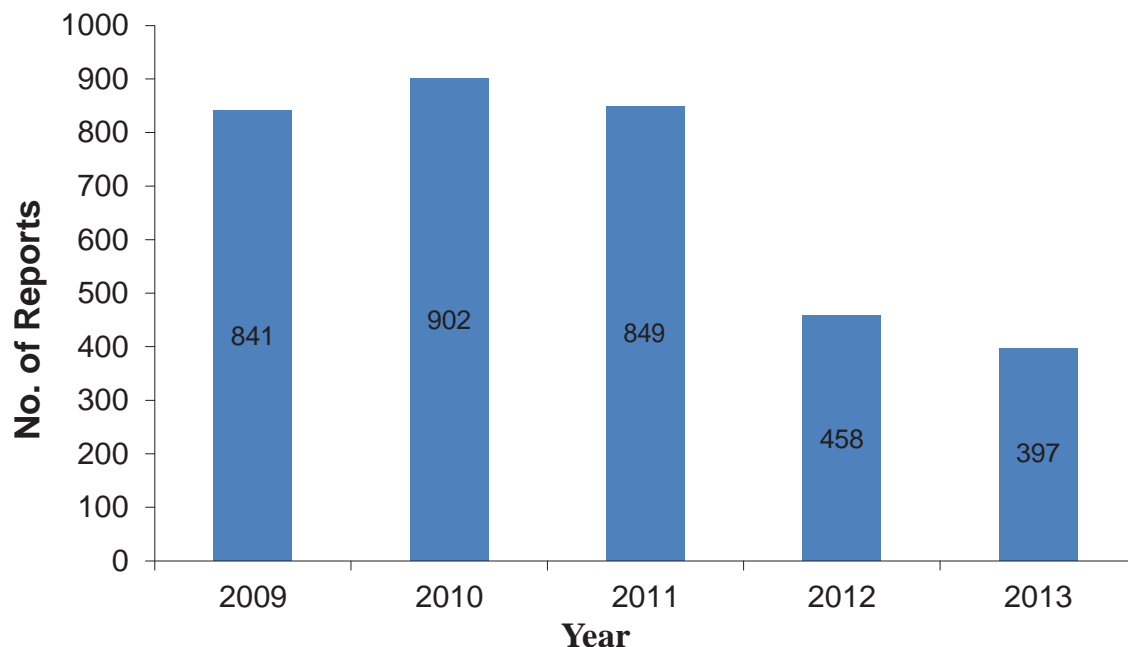
<b>Characteristic</b>		<b>N</b>	<b>%</b>
<b>Gender</b>			
Female		46	20%
Male		180	80%
Transgender		<5*	
Unknown		<5*	
<b>Race/Ethnicity</b>			
Hispanic/Latino		43	19%
White		164	74%
African-American/Black		12	5%
American Indian/Alaskan Native		<5	
Asian/Pacific Islander		<5	
More than one race		<5	
Other		<5	
<b>Age</b>			
Under 20		<5	
20 to 29		55	26%
30 to 39		80	38%
40 to 49		44	21%
50+		29	14%
<b>Sexual Orientation</b>			
Bisexual		14	6%
Gay or Lesbian		7	3%
Heterosexual or Straight		201	91%
<b>City</b>			
Providence		148	65%
Cranston		5	2%
Central Falls		5	2%
Pawtucket		10	4%
Warwick		11	5%
Woonsocket		9	4%
Other		39	17%

## D) Active Tuberculosis in Rhode Island

Tuberculosis (TB) is a disease that is spread from person-to-person through the air, and it is particularly dangerous for people infected with HIV. Worldwide, TB is the leading cause of death among people infected with HIV.

- Approximately 2 billion people (one-third of the world's population) are infected with *Mycobacterium tuberculosis*, the cause of TB.
- TB is the cause of death for one out of every three people with AIDS worldwide.
- The spread of the HIV epidemic has significantly impacted the TB epidemic - one-third of the increase in TB cases over the last five years can be attributed to the HIV epidemic (Source: UNAIDS).

**Figure 32. Number of Latent Tuberculosis Infection Reports\*, RI, 2009 - 2013**



### **Epidemiology of Active TB Cases, Rhode Island, 2013**

In 2013, there were 27 cases of active tuberculosis reported in Rhode Island and 20 suspected cases investigated for TB with active disease ruled out. These numbers are an increase from the 23 cases reported in 2012.

Of the 27 cases of active tuberculosis reported in 2013, 93% were residents of Providence County, 4% from Kent County, and 4% from Newport County. This proportion for Providence County is comparable to previous years, and aligns with what can be expected considering that

Providence County is home to over half of the population of Rhode Island, with the City of Providence accounting for 16% of the state's population. In addition, 92% of the total Hispanic population, 87% of the total Black population and 76% of the total Asian population of Rhode Island reside in Providence County, making it the most culturally diverse area, and home to a majority of the state's foreign-born population.

In 2013, the race/ethnicity of active cases was distributed as follows: six Hispanic (22%), nine Asian (33%), eight non-Hispanic Black (30%), and four non-Hispanic White (15%). All 27 cases had country of origin information. Rhode Island has historically had more cases in the foreign-born population than the U.S. born population. In 2013, 85% of cases were foreign-born. By region, the largest percentage of foreign-born cases reported in 2013 was from Asia (40%), followed by Africa (26%), and the Caribbean and Central America (13% each). Table 10 below compares the demographic distribution of active cases of tuberculosis between 2012 and 2013.

Among cases reported in 2013, the major site of disease was exclusively pulmonary in 70% of the cases and 26% had extra-pulmonary involvement exclusively. Cases with both sites of disease represented 4% of cases reported in 2013. The percentage of cases with any pulmonary involvement in 2013 (78%) is slightly higher than seen in 2012 (70%). Clinically, 20 cases reported in 2013 (74%) had an abnormal chest x-ray or chest CT, with 25% (5 of 20) showing cavitory disease. TB risk factors reported among 2013 cases include: HIV/TB co-infection, diabetes mellitus, end-stage renal disease, and immunosuppression (not HIV/AIDS).



**Table 10: Demographics of Reported Cases of Tuberculosis,  
Rhode Island, 2012-2013**

	2012		2013	
	No. of Cases	Percent of Cases	No. of Cases	Percent of Cases
<b>Total No. Confirmed Cases</b>	<b>23</b>		<b>27</b>	
<b>Race/Ethnicity</b>				
Non-Hispanic White	4	17.4%	4	14.8%
Non-Hispanic Black	4	17.4%	8	29.6%
Hispanic	9	39.1%	6	22.2%
Asian/Pacific Islander	6	26.1%	9	33.3%
Am. Indian/Native American	0	0.0%	0	0.0%
<b>Sex</b>				
Female	10	43.5%	11	40.7%
Male	13	56.5%	16	59.3%
<b>County of Residence</b>				
Bristol	1	4.3%	0	0.0%
Kent	2	8.7%	1	3.7%
Newport	0	0.0%	1	3.7%
Providence	20	87.0%	25	92.6%
Washington	0	0.0%	0	0.0%
<b>Country of Origin</b>				
United States	10	43.5%	4	14.8%
Not U.S.	13	56.5%	23	85.2%
Unknown	0	0.0%	0	0.0%
<b>Age Group</b>				
0-4	2	7.4%	1	3.7%
5-14	0	0.0%	1	3.7%
15-24	4	17.4%	1	3.7%
25-44	5	21.7%	9	33.3%
45-64	4	17.4%	4	14.8%
65 +	8	34.8%	11	40.7%

***HIV/TB Co-infection***

An estimated 10-15 million Americans are infected with TB bacteria, with the potential to develop active TB disease in the future. About 10 percent of these infected individuals will develop TB at some point in their lives. However, the risk of developing TB disease is much greater for those infected with HIV and living with AIDS. Because HIV infection so severely weakens the immune system, people dually infected with HIV and latent TB have a 100% lifetime probability of developing active TB disease and becoming infectious compared to

people not infected with HIV. CDC estimates that 10 to 15 percent of all TB cases and nearly 30 percent of cases among people ages 25 to 44 are occurring in HIV-infected individuals.

This high level of risk underscores the critical need for targeted TB screening and preventive treatment programs for HIV-infected people and those at greatest risk for HIV infection. All people infected with HIV should be tested for TB, and, if infected, complete preventive therapy as soon as possible to prevent TB disease. (Source: <http://www.cdc.gov/hiv/pubs/facts/hivtb.htm>)

**TB Care in Rhode Island** - The Miriam Hospital RISE TB Specialty Clinic is a state-funded, referral-only TB clinic in Rhode Island where patients with suspected or confirmed TB disease or LTBI can be referred for specialty care. The RISE Clinic receives approximately 1,100 patient referrals each year. The clinic manages care for the majority of active TB cases in RI. An average of over 680 cases of LTBI have been reported each year from 2009-2013 (see Figure 33). In 2013, 397 LTBI cases were reported in Rhode Island. Due to length of treatment and follow-up appointments required for active TB and LTBI care, patient visits for RISE clients can total near 8,500 visits for one year. Though the clinic utilizes an opt-out policy for HIV testing, it continues to offer and encourage HIV testing for all active TB cases and LTBI patients.

Since HIV testing is an integral part of active TB case management, it has been incorporated into the TB Elimination National TB Program Objectives and Performance Targets that the Rhode Island TB Program strives to achieve. The TB Program’s 2014 target is for 85% of active TB cases in Rhode Island to have a known HIV status at time of TB diagnosis. As can be seen in Table 2 below, the TB Program consistently met this objective from 2010 through 2012, but the number of cases with HIV test results decreased to 78% in 2013.

**Table 11: RI TB Program Progress on HIV Co-infection Testing**

Objective: Increase the proportion of TB cases with positive or negative HIV test result reported to 85%.					
Year	2010	2011	2012	2013	2014
Goal	65%	70%	75%	80%	85%
Results	88%	96%	91%	78%	

In order to identify areas for further improvement of HIV testing among diagnosed TB cases, each year the TB Program investigates any case for which an HIV status is unknown. Review of data from years prior to 2008 indicated that many cases did not have a known status simply because HIV testing was not offered. Close partnership between the TB Program and physicians at the RISE Clinic where most active TB cases are seen has aided in improving testing percentages. The clinic utilizes an opt-out policy for HIV testing, however, the clinic continues to offer and encourage HIV testing for all active cases. The Medical Director of the RISE Clinic advocates for the HIV test to be offered after the client is acclimated to their DOT therapy and routine clinical visits. Of the two cases not offered HIV testing in 2013, one was a young child and the other was an elderly adult. Four cases (15%) were offered HIV testing, but refused, accounting for the lower percent of cases tested for HIV in 2013.

**Table 12: Reasons for Not Obtaining HIV Status in TB Cases, Rhode Island, 2009-2013**

	2009		2010		2011		2012		2013	
	#	%	#	%	#	%	#	%	#	%
Total Cases	24	--	26	--	27	--	23	--	27	--
<b>Known HIV Status</b>	<b>22</b>	<b>92%</b>	<b>23</b>	<b>88%</b>	<b>26</b>	<b>96%</b>	<b>21</b>	<b>91%</b>	<b>21</b>	<b>78%</b>
Expired before Testing	0	0%	1	4%	0	0%	0	0%	0	0%
Moved before testing	0	0%	0	0%	0	0%	0	0%	0	0%
Under the care of private provider, unable to obtain information	1	4%	1	4%	0	0%	0	0%	0	0%
Under the care of another jurisdiction	0	0%	0	0%	0	0%	0	0%	0	0%
No HIV Testing Offered	1	4%	0	0%	1	4%	2	9%	2	7%
Refused	0	0%	1	4%	0	0%	0	0%	4	15%

***HIV/TB Co-Infection Trends, Rhode Island***

Rhode Island follows the national AIDS/TB co-infection trends. On average, less than 8% of all TB infections diagnosed in the past five years in Rhode Island were HIV/AIDS related except in 2010, when none of the TB case had HIV/AIDS diagnosis.

**Table 13: HIV/TB Co-infection, Rhode Island, 2009-2013**

	2009	2010	2011	2012	2013
Number of TB Cases	24	26	27	23	27
Number HIV Positive	<5	0	<5	<5	<5
Percent HIV Positive	13%	0%	7%	4%	7%

**E) Viral Hepatitis C (HCV) in Rhode Island**

This section duplicates what was reported in the 2011 report. No surveillance data have been analyzed since 2009 because of the absence of state or Federal resources to conduct such activities.

The US prevalence rate of hepatitis C was estimated at 1.6% in 2005. However, actual national prevalence is likely to be considerably higher due to variances associated with the surveillance of the disease such as low levels of public knowledge and understanding of HCV. The lack of surveillance and programmatic funding for testing and referral resources for the high risk increase the likelihood that current prevalence rates are highly underestimated. Based on this estimate, RI is likely to have as many as 17,000 prevalent cases of hepatitis C. This is a huge burden of disease, in recognition of which RI in 1998 launched a provider and public education

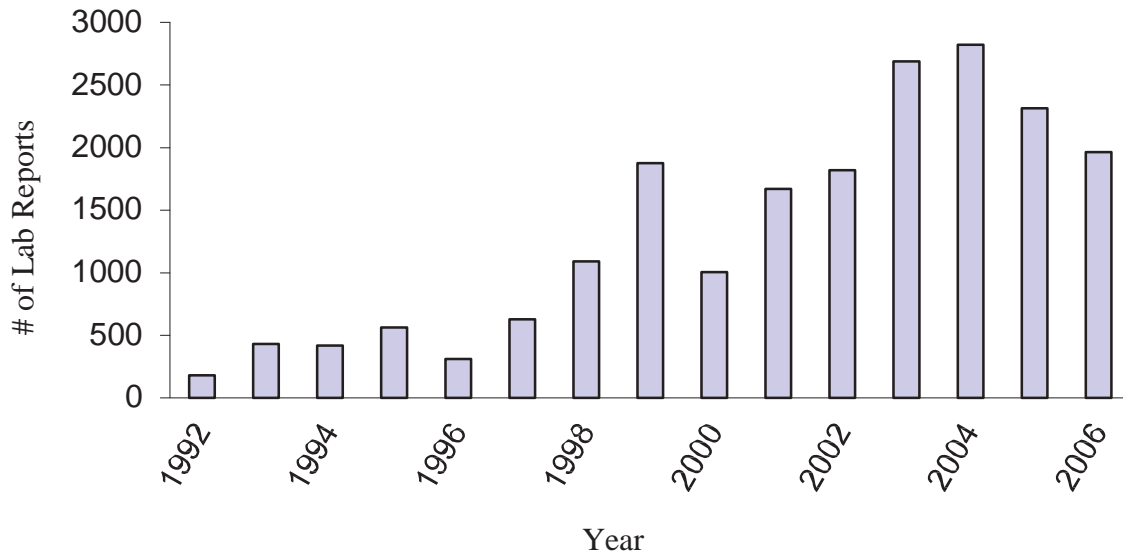
campaign and started systematic surveillance to the extent feasible by limited resources. Despite not having resources for analysis, the Viral Hepatitis Program continues to collect laboratory data as it is a reportable condition in RI. Data obtained from laboratories is often scant and contain missing information in critical data fields. Blood work ordered by drug treatment facilities often lack names and have codes to protect a patient's confidentiality, and often are lost to the system because of inadequate follow up for transcription. Duplicates are removed from the yearly positive report totals. Some duplication may not be detected if patients concerned about their identity, use aliases. Additionally, these lab reports also have large percentage of race/ethnicity data missing or unknown. Also, this reporting system depends upon the cooperation and willingness of the laboratories to report, and it is therefore possible that underreporting occurs. These problems should be addressed, or at least considered, if and when the program performs an analysis of the data.

It is estimated that approximately 15% of individuals with HCV will spontaneously resolve their infection without treatment and in the absence of serial viral load testing, and in the absence of an easy to perform antigen marker test, cannot be recognized as resolved cases, and remain in the registry. Another shortcoming is that until a second confirmatory test (such as RIBA or PCR) is received for cases, most of them remain in the system in suspect status; and may represent false positives.

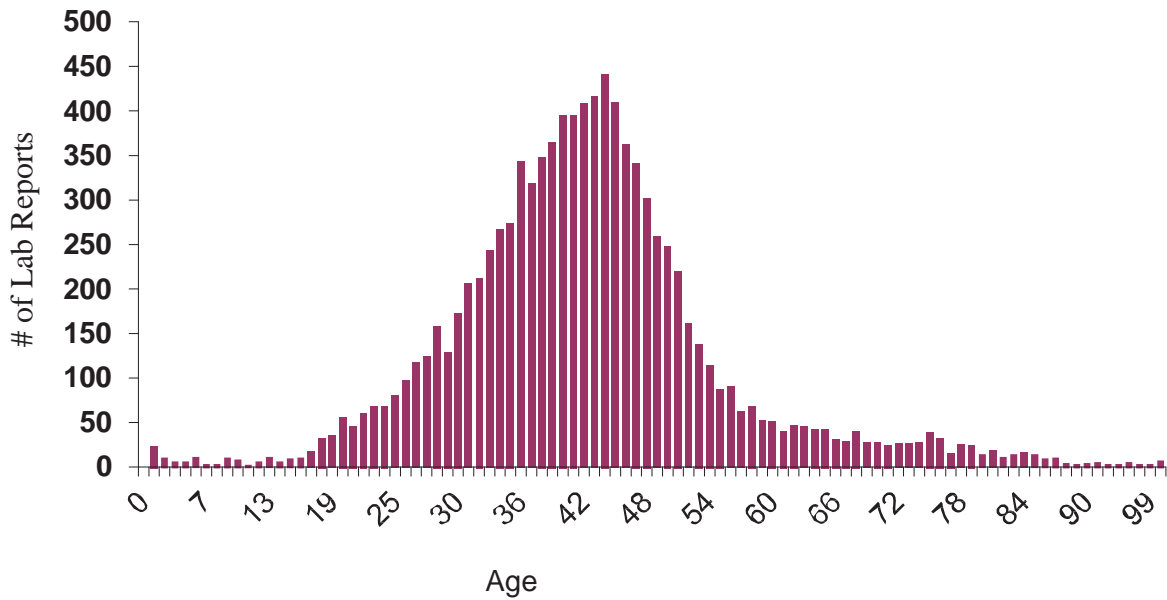
In 2006, the Hepatitis Surveillance Program began using the NEDSS (National Electronic Disease Surveillance System) Based System. This is a case based surveillance system and has significantly reduced the number of duplicate cases. This helps to streamline the investigation process to determine a cases true status (suspect/confirmed) as duplicate investigations aren't conducted and valuable resources are used efficiently which reduces the issue of duplicity significantly and also allows proper follow-up of cases to determine their status (suspect/confirmed).

Laboratory reports from the years 1992-2006 (September) give an indication of trends over this time period. The number of positive reports increased significantly from 182 reports in 1992 to 1,962 reports in 2006 (9 months). Increased provider and public knowledge regarding HCV can account for a significant percentage of this increase; however, this percentage cannot be determined. The increase may be due to the tendency of positive cases to be identified years after the exposure, and disease trends have suggested that the greatest number of new cases were contracted 10-30 years ago. The following charts show a basic overview of the number of positive lab reports in Rhode Island from 1992 to 2006 (Jan-Sep) and also the number of new cases by sex and age-group (Oct.-Dec).

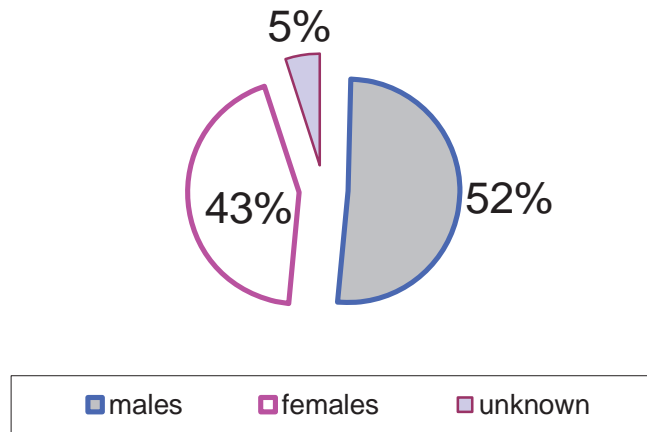
**Figure 33. Hepatitis C Lab Reports by Year  
RI 1992-2006 (September)**



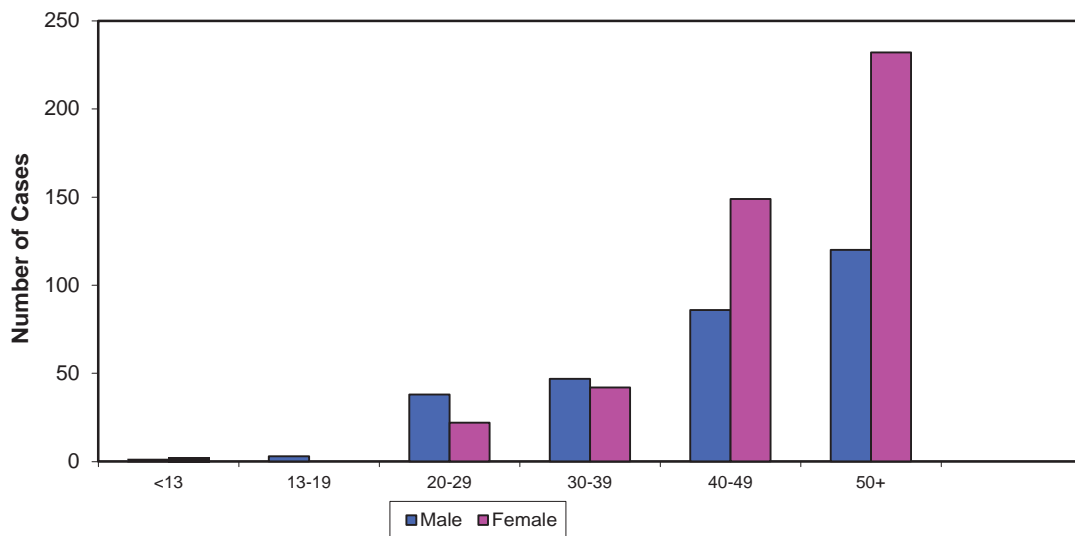
**Figure 34. Positive Hepatitis C Test Results  
RI 1992-2002**



**Figure 35. Positive HCV Lab Reports  
RI 1992-2006**



**Figure 36. Confirmed Chronic Hepatitis C cases by sex and age, RI 2008**



About one quarter of HIV-infected persons in the United States are also infected with hepatitis C virus (HCV). 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. (Source: [http://www.cdc.gov/hiv/pubs/facts/HIV-HCV\\_Coinfection.htm](http://www.cdc.gov/hiv/pubs/facts/HIV-HCV_Coinfection.htm))

HEALTH has responded over the course of the past few years to the high prevalence of hepatitis C, by systematic inclusion of hepatitis C prevention and control strategies in all HIV/AIDS related programming. Rhode Island's ENCORE program consists of education, needle exchange, counseling, outreach, and referrals. Because IDU is currently the most significant mode of HCV

transmission, the ENCORE program captures a portion of the highest risk population. ENCORE was designed for and has traditionally focused on HIV and AIDS. However, HIV and HCV are transmitted comparably through IDU, and integration of HCV prevention and referrals (for testing and treatment services with providers who have agreed to participate) into the ENCORE program is therefore logical and efficient.

Vendors providing HIV counseling and testing receive thorough HIV education and certification. Hepatitis C information has been integrated into the education, which is conducted by a public health nurse. The goal is to encourage these vendors to educate their clients about hepatitis C by integrating HCV into HIV prevention materials, trainings, and staff development. The vendors subsequently make referrals to HCV testing services as appropriate. Public education materials and HCV screening and treatment guidelines have been distributed to providers.

## **F) Behavioral Risk Factor Surveillance System (BRFSS)**

The BRFSS is an on-going population based telephone interview survey, administered and supported by the CDC's National Center for Chronic Disease Prevention and Health Promotion. Surveys were developed and conducted to monitor state-level prevalence of the major behavioral risks among adults associated with premature morbidity and mortality. The information attained from the BRFSS is useful in describing the populations at risk for contracting HIV through their behaviors.

BRFSS surveys are conducted annually and the BRFSS data from 2011 survey shows 40.9% of those surveyed in Rhode Island indicated that they were ever tested for HIV at some point in their life aside from routine screening when donating blood compared to 36% nationally. Among RI adults, 3% of adults admitted having a high-risk situation (IDU, treatment for STD, exchanging drugs/money for sex, or anal sex without a condom, any within the last 12 months) in the previous year compared to 6% nationwide.

In 2012, several questions were asked about HIV testing. The percent of RI adults who were tested for HIV (not including routine screening associated with blood donation) was similar to the U.S. percentage (34% compared to 35%).

The prevalence of HIV risk behavior (IDU, treatment for STD, exchanging drugs/money for sex, or anal sex without a condom, any within the last 12 months), among RI adults was about the same as compared to the national median (3% vs. 4%).

In 2013, similar amounts of Rhode Islanders reported having been tested for HIV (34.8%). only 34.8.7% of respondents. The majority of respondents said that they were tested at a private doctors office (51.4%), followed by a clinic (16.4%), and then 'somewhere else' (10.6%).

## **G) Youth Risk Behavior Survey (YRBS)**

The Youth Risk Behavior Survey (YRBS) is an anonymous and voluntary survey conducted on alternate years among randomly selected high schools students nationwide. It was developed by the Division of Adolescent and School Health at the Centers for Disease Control and Prevention

(CDC). More than 13,000 U.S. high school students participated in the 2013 National YRBS. Parental permission was obtained for students to participate in the survey, student participation was voluntary, and responses were anonymous. States and large urban school districts could modify the questionnaire for their own surveys to meet their needs. The 2013 YRBSS report includes National YRBS data and data from surveys conducted in 42 states and 21 large urban school districts.

In 2011 nationwide, 47.4% the surveyed students ever had sexual intercourse, while 6.2% had sexual intercourse for the first time before age 13. During their life 15.3% students had sexual intercourse with four or more persons. About 22% had alcohol or used drugs before last sexual intercourse and 39.8% of those who are sexually active did not use a condom during last sexual intercourse.

In 2011 41.7% of Rhode Island high school students reported ever having sexual intercourse compared to 45.5% in 2007. And 40.9% among those who are sexually active did not use condoms during last intercourse, which decreased from 66% in 2007. Ten percent of the students had sexual intercourse with four or more partners in 2011, which was similar to 2007. And 20.8% had alcohol or used drugs before last sexual intercourse among those who were sexually active compared to 17.5% in 2007. About 10.5% of RI youth identified themselves as LGBU, which is also similar to 2007. Moreover it was also observed similar to 2007 that LGBU students were found more to be forced to have sexual intercourse and have intercourse before 13 years of age, bullied at schools, and not use condoms compared to those students who identified themselves as heterosexuals or straight.

In 2013, 37.4% of Rhode Island high school students reported ever having sexual intercourse, compared to 46.8% nationwide in 2013 (Table 14). Additionally, a lower proportion of RI students reported not using a condom during their last sexual intercourse (32.4%) than nationally. The data also shows a lower proportion of RI students reported multiple partners (four or more in their life) compared to the national estimates.

**Table 14. Youth Behavioral Survey Sexual Health Results, RI and US, 2013**

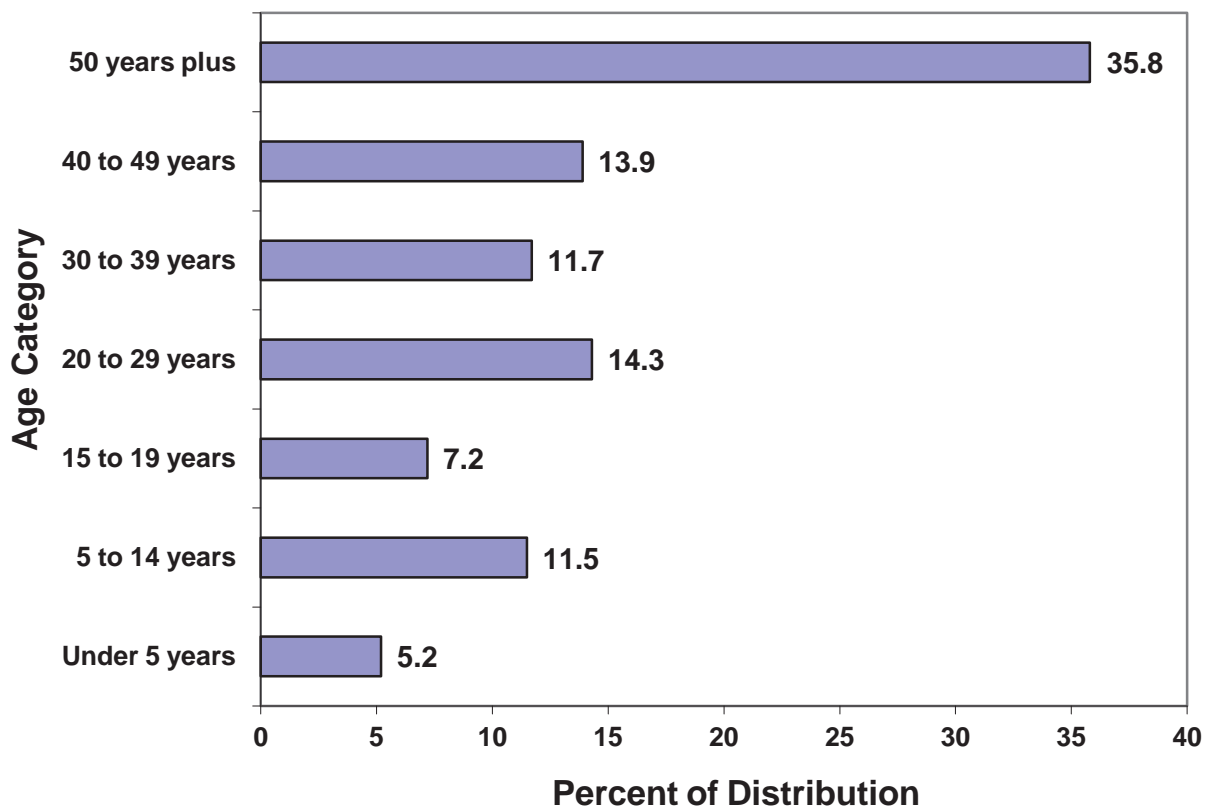
Question	Rhode Island 2013 (Confidence Interval)	United States 2013 (CI)	p-value
Ever had sexual intercourse	37.4 (31.8–43.4)	46.8 (43.7–49.8)	<.01
Had sexual intercourse before age 13 years (for the first time)	4.1 (2.6–6.5)	5.6 (4.9–6.5)	0.13
Had sexual intercourse with four or more persons (during their life)	7.9 (5.7–10.9)	15.0 (13.6–16.6)	<.01
Were currently sexually active (sexual intercourse with at least one person during the 3 months before the survey)	27.0 (22.1–32.5)	34.0 (31.6–36.5)	0.01
Did not use a condom (during last sexual intercourse among students who were currently sexually active)	32.4 (26.7–38.7)	40.9 (38.1–43.7)	0.01



## 5) Socio-demographic characteristics of the population of Rhode Island

Rhode Island is a small but densely populated state; it has the distinction of being the fourth most densely populated state in the United States. Data to describe the population of Rhode Island were obtained from the 2012 Population Estimates and 2011 American Community Survey of the U.S. Census Bureau. In 2012, Rhode Island had a total population of 1,050,292. Of these 541,950 (52 percent) were females and 508,341 (48 percent) were males. The median age was 39.8 years old. Twenty one percent of the population were under 18 years of age and 15 percent were 65 years and older.

**Figure 37. Age Distribution of People in Rhode Island in 2012**

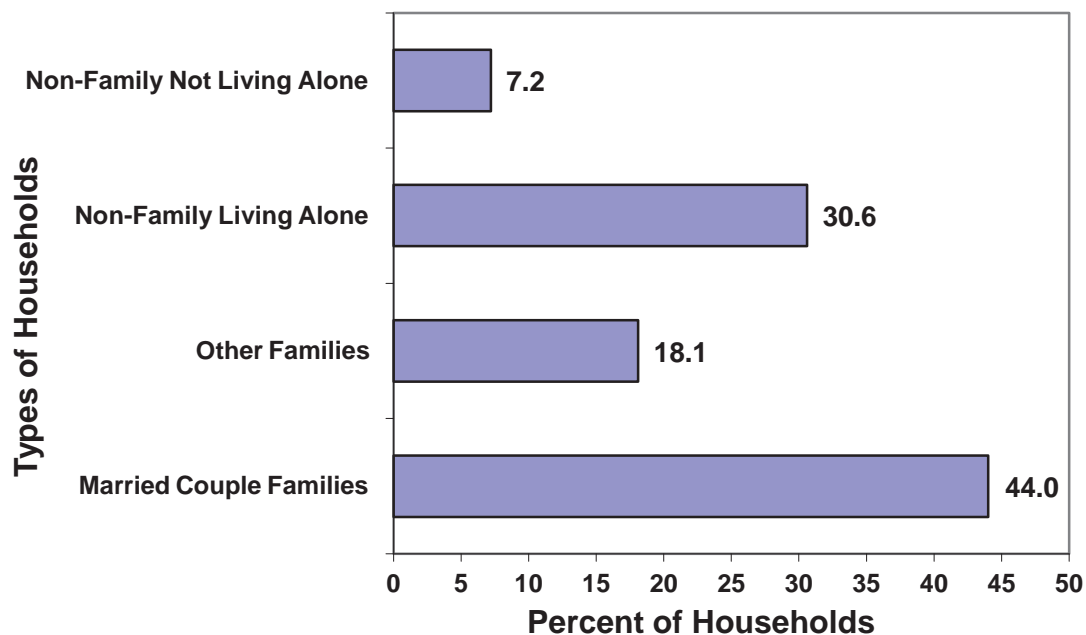


*Source: US Census Bureau, 2012 Population Estimates*

**Race and Ethnicity:** Data on race and ethnicity were obtained from the 2012 population estimates from the U.S. Census Bureau. In 2012, for people reporting one race alone, 86% were White; 7% were Black or African American; less than 1 % were American Indian and Alaskan Native; 3% were Asian; less than 0.5 % were Native Hawaiian and Other Pacific Islander. 2.5% reported two or more races. Thirteen percent of the people in Rhode Island were Hispanic or Latino.

**Households and Families:** Data on households and families were obtained from the 2011 American Community Survey from the U.S. Census Bureau. In 2011, there were 412,259 households in RI. Families made up 62% of the households in RI. This figure includes both married-couple families (44%) and other families (18 %). Non-family households made up 38% of all households in R I. Most of the non-family households were people living alone (80%), but some were comprised of people living in households in which no one was related to the householder. Twenty-one percent of people over five years old spoke a language other than English at home.

**Figure 38. Types of Households in Rhode Island 2011**

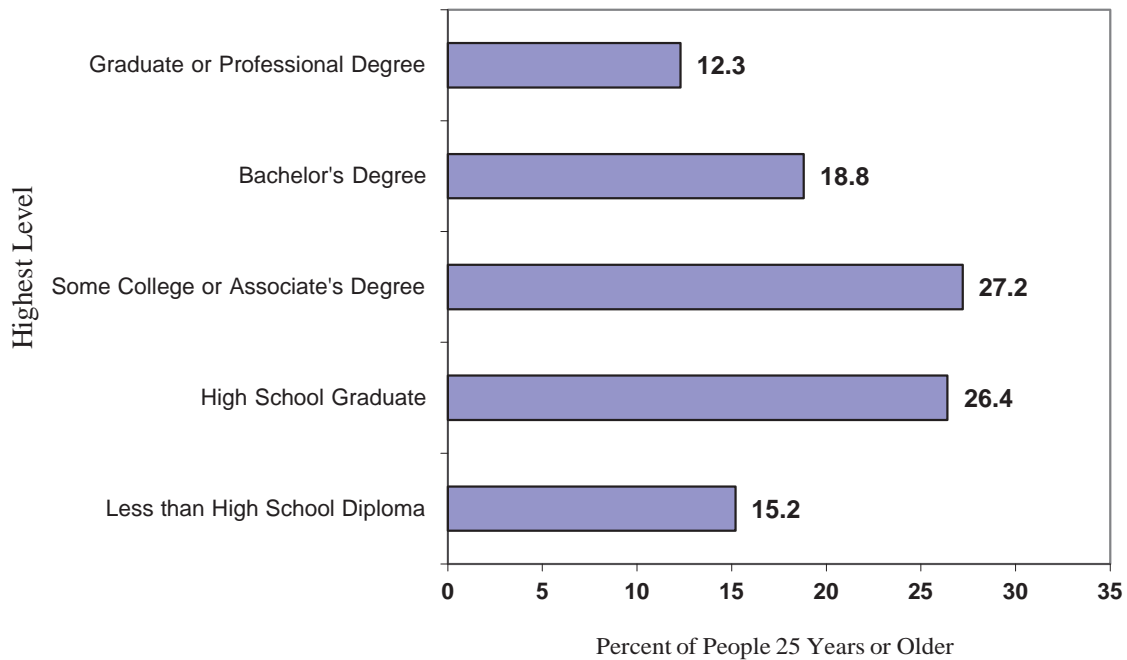


*Source: U.S. Census Bureau, 2011 American Community Survey*

**Place of Birth and Citizenship Status:** Data on these variables were obtained from the 2011 American Community Survey. Thirteen percent of people were foreign-born, and 50 % of foreign-born people were naturalized U.S. citizens. Of foreign born people, 46 % were born in Latin America, 23 % were born in Europe, 17 % were born in Asia, 11% were born in Africa, 3% were born in Northern America, and less than 0.5% were born in Oceania (Islands of the tropical Pacific Ocean).

**Education:** Data on education were obtained from the 2012 Population Estimates and the 2011 American Community Survey. In 2012, eighty-four percent of people 25 years of age and over had at least graduated from high school and 31% had a bachelor's degree or higher. The 2011 American Community Survey reports that total school enrollment in Rhode Island was 277,923. Pre-elementary school enrollment was 26,680 and elementary or high school enrollment was 151,190 children. College and Graduate school enrollment was 99,774.

**Figure 39. The Educational Attainment of People in Rhode Island in 2011**



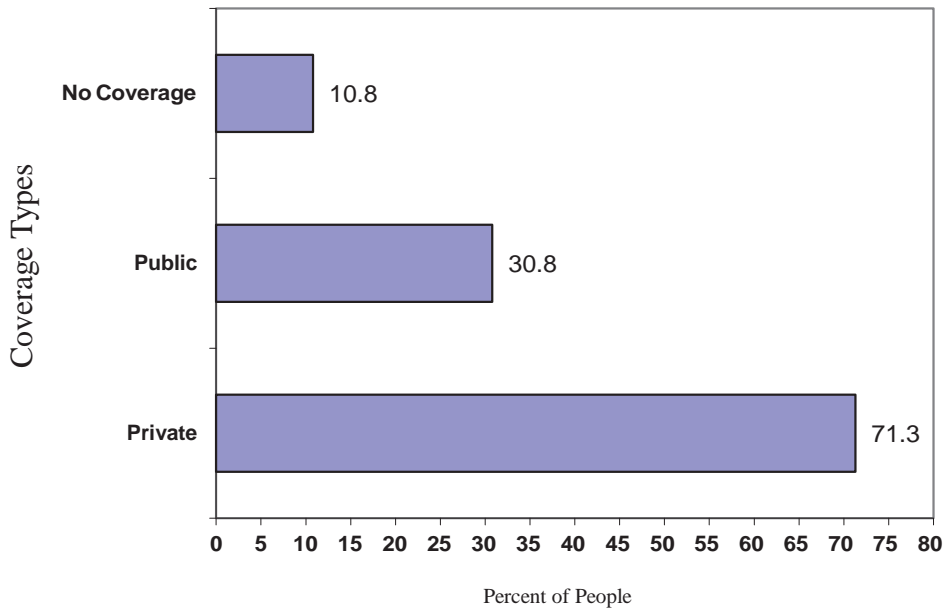
*Source: U.S. Census Bureau, 2011 American Community Survey*

**Income:** Data on income were obtained from the 2011 American Community Survey. In 2011, the median income of households in Rhode Island was \$53,636. Seventy-six percent of the households received earnings and 17% received retirement income other than Social Security. Thirty percent of the households received Social Security. The average income from Social Security was \$16,619. These income sources are not mutually exclusive; that is, some households received income from more than one source.

**Poverty and participation in Government Program:** Data on poverty were obtained from the 2011 American Community Survey. In 2011, 15 percent of people were below poverty level. Twenty-two percent of related children under 18 were below the poverty level, compared with 10% of people 65 years old and over. Eleven percent of all families and 30 percent of families with a female householder and no husband present had incomes below the poverty level.

**Health Insurance Coverage:** Data on Health Insurance Coverage were obtained from the 2011 American Community Survey. In 2011, seventy-one percent of people had private health insurance and thirty-one percent had public health coverage. Eleven percent of people had no health insurance coverage.

**Figure 40: Health Insurance Coverage Rhode Island: 2011**



*Source: US Census Bureau, 2011 American Community Survey*

**Employment Status:** Data on employment status from obtained from the 2011 American Community Survey. Of people over 16 years of age, 66 percent were in the civilian labor force and ten percent of the civilian labor force was unemployed. Of females over 16 years of age, 62 percent were in the civilian labor force and 10 percent were unemployed.

## **6) List of Figures and Tables**

### **Figures:**

- Figure 1. Rhode Island HIV Incidence 2009 - 2013
- Figure 2. HIV Case Rates by Gender, RI, 2009 - 2013
- Figure 3. Rate of HIV New Diagnosis by Age group Among Males, RI, 2009 – 2013
- Figure 4. Rate of HIV New Diagnosis by Age group Among Females, RI, 2009 - 2013
- Figure 5. Rate of HIV New Diagnosis by Race and Ethnicity, RI, 2009 - 2013
- Figure 6. Male Rate of HIV New Diagnosis by Race and Ethnicity, RI, 2009 - 2013
- Figure 7. Female Rate of HIV New Diagnosis by Race and Ethnicity, RI, 2009 – 2013
- Figure 8. Hispanic/Latino Male HIV Cases by Risk Factor, RI, 2010 - 2013
- Figure 9. Hispanic/Latina Female HIV Cases by Risk Factor, RI, 2010 - 2013
- Figure 10. Black/African American Male HIV Cases by Risk Factor, RI, 2010 - 2013
- Figure 11. Black/African American Female HIV Cases by Risk Factor, RI, 2010 - 2013
- Figure 12. White Male HIV Cases by Risk Factor, RI, 2010 - 2013
- Figure 13. White Female HIV Cases by Risk Factor, RI, 2010 - 2013
- Figure 14. HIV/AIDS Deaths by Gender, RI, 2009 - 2013
- Figure 15. HIV Cases Progressing to AIDS and Deaths, RI, 2009-2013
- Figure 16. Proportion of Male HIV Cases Who Are MSM, RI, 2009 - 2013
- Figure 17. Male HIV Cases by Risk Category, RI, 2009 - 2013
- Figure 18. MSM HIV Proportions by Race/Ethnicity, RI, 2009 - 2013
- Figure 19. MSM HIV Rates by Race/Ethnicity, RI, 2009 - 2013
- Figure 19. MSM HIV Rates by Race/Ethnicity, RI, 2009 - 2013
- Figure 20. Newly Identified HIV/AIDS Cases, MSM, By Age, RI, 2009 - 2013
- Figure 21. Female HIV Rates by Race/Ethnicity, RI, 2009 - 2013
- Figure 22. Female HIV Cases by Risk Factor, RI, 2009 - 2013
- Figure 23. HIV Cases Among Youth (13-24 years old), RI, 2009 - 2013
- Figure 24. Male Youth HIV Cases by Risk Factor, RI, 2009 - 2013
- Figure 25. Female Youth HIV Cases by Risk Factor, RI, 2009 - 2013
- Figure 26. Distribution of HIV CTR Clients by Gender, RI, 2013
- Figure 27. Distribution of HIV CTR Clients by Age Category, RI, 2013
- Figure 28. Distribution of HIV CTR Clients by Race/Ethnicity, RI, 2013

- Figure 29. New Client Enrollment, ENCORE, RI, 2009 - 2013
- Figure 30. New Client Enrollment by Gender, ENCORE, RI, 2009 - 2013
- Figure 31. New Client Enrollment by Race/Ethnicity, ENCORE, RI, 2009 - 2013
- Figure 32. Number of Latent Tuberculosis Infection Reports, RI, 2009 - 2013
- Figure 33. Hepatitis C Lab Reports, RI, 1992 – 2006 (September)
- Figure 34. Positive Hepatitis C Test Results, RI, 1992 - 2002
- Figure 35. Positive Hepatitis C Lab Reports, RI, 1992 - 2006
- Figure 36. Confirmed Chronic Hepatitis C Cases by Sex and Age, RI, 2008
- Figure 37. Age Distribution of People in Rhode Island, 2012
- Figure 38. Types of Households in Rhode Island, 2011
- Figure 39. The Educational Attainment of People in Rhode Island, 2011
- Figure 40. Health Insurance Coverage, RI, 2011

**Tables:**

- Table 1. HIV Cases, Demographics and Risk Factor Characteristics, RI, 2009-2013
- Table 2. Male HIV Cases: Demographics and Risk Factor Characteristics, RI, 2009-2013
- Table 3. Female HIV Cases: Demographics and Risk Factor Characteristics, RI, 2009-2013
- Table 4. HIV/AIDS Death by Demographic Characteristics, RI, 2009 - 2013
- Table 5. AIDS Cases: Demographic and Risk Factor Characteristics, RI, 2009 - 2013
- Table 6. Characteristics of Individuals Diagnosed with HIV alone and Individuals diagnosed with HIV presenting with AIDS, RI, 2009 - 2013
- Table 7. STD/HIV Co-infections, RI, 2010 - 2013
- Table 8. HIV Counseling, Testing, and Referral Site Client Demographics, RI, 2013
- Table 9. ENCORE New Client Enrollment, RI, 2013
- Table 10. Demographics of Reported Cases of Tuberculosis, RI, 2012-2013
- Table 11. RI Tuberculosis Program Progress on HIV Co-infection Testing, 2010 - 2014
- Table 12. Reasons for Not Obtaining HIV Status in TB Cases, RI, 2009 -2013
- Table 13. HIV/TB Co-infection, RI, 2009 -2013
- Table 14. Youth Behavioral Risk Survey Sexual Health Results, RI and US, 2013

**Citation (Figure 19):**

Lieb, Spencer, Stephen Fallon, Samuel Friedman, Daniel Thompson, Gary Gates, Thomas Liberti, and Robert Malow. "Statewide Estimation of Racial/Ethnic Populations of Men Who Have Sex with Men in the U.S." Public Health Reports 126(2011): 60-72. Web.

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