

A Research Report: The Profile of Substance Use and Other Indicators of Well-Being Among Youth in Paterson, New Jersey



**PATERSON COALITION
AGAINST SUBSTANCE ABUSE**

MONTCLAIR STATE UNIVERSITY



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Executive Summary

The current rates of substance use among the sample ($N=737$) of Paterson high school students presented in this report deserves the attention of community members, school staff, parents, policy makers, and other key members of the Paterson community. Nine sections are presented in this research report focusing on *Alcohol Use*, *Tobacco Use*, *Marijuana Use*, *Illicit Drug Use*, *Mental Health Indicators*, *Sexual Minority Status and Substance Use*, and *Protective Factors (e.g., Family Cohesion)*. A summary of findings is presented below, however the entire report goes into significant detail regarding these rates of use. This report also compares these rates to both New Jersey and national averages.

Alcohol

- 30% of surveyed Paterson youth used alcohol before the age of 13.
- 20% of the students sampled have used alcohol in the last 30 days.
- Boys (27.7%) were more inclined to binge drink as compared to girls (16.5%).
- The drinking rates (i.e., past 30-day use and binge drinking) were higher for Hispanic students as compared to their racial and ethnic counterparts.
- The highest rates of alcohol use were observed among juniors (32.7), which is nearly a triple increase from freshman year.
- Approximately 38% of the sample believed that alcohol use puts them at “great risk.”
- Paterson youth who drank alcohol during the past 30 days were also 3 times more likely to smoke marijuana before age 14.
- 60% of Paterson youth purchased alcohol from liquor stores.
- 40% of Paterson adolescents also admitted to having adults purchase their alcohol from liquor stores.

Tobacco

- There appears to be a precipitous increase in tobacco use from freshman (7.4%) to senior year (33.3%).
- Both lifetime use (31%) and past 30-day use (21%) is higher for Hispanic students as compared to their racial counterparts. However, the rates of tobacco use reported by Hispanic adolescents in our sample are lower than both state and national averages.
- Boys were twice as likely to use tobacco products as compared to girls.
- Approximately half of the sample (49.2%) believed that tobacco use would place them at *great risk*.

- Approximately 17.7 % of the students have used e-cigarettes, with seniors reporting the highest percentage of use (14.5%).
- A greater percentage of students seem to be using hookah products (29.6%) as compared to e-cigarettes (17.7%).
- Hookah use appears to be more popular among males (33.7%) and its use occurs more frequently in 10th grade (32.5%).

Marijuana

- Black (33.3%) and Hispanic (29.7%) students reported the highest marijuana use before the age of 13.
- Approximately 42.7% of Paterson youth do not believe that marijuana place them at much risk.
- A significant spike in marijuana use was observed from 9th (8.5%) to 10th (30.5%) grade.
- Regarding past 30-day use, males (21.3%) reported higher rates of marijuana use than females (14.3%).

Other Illicit Drug Use

- Both reported cocaine (6.2%) and heroin (6.8%) use for our sample was higher than state and national averages.
- Hispanic youth reported the highest rates of all illicit drug use (e.g., cocaine, heroin, inhalants, methamphetamines, and prescription drugs).
- Males, as compared to females, had higher rates of use across all illicit drug categories.
- Prescription drug use is lower for our sample when compared to state level data (6% vs. 12%).

Mental Health

- Among the entire sample of Paterson adolescents, a majority disclosed experiencing depression (50.1%) and anxiety (57.1%; somewhat to very true).
- Females reported higher scores (very true) for all mental health indicators when compared to males—e.g., depression (32.8%), anxiety (17.4%), and suicidal ideations (17.6%).
- Hispanic and African American students reported similar rates of depression and anxiety. However, the Hispanic youth who were sampled disclosed more suicidal ideations (16.4%) than their African American or white counterparts.
- Sexual minority teens (LGBTQ) reported rates of depression (51.5%) at nearly quadruple the rates of non-sexual minority youth.
- Sexual minority teens' rates of anxiety were approximately 10% greater than that of their non-minority peers.

- ***Sexual minority adolescents' reports of suicidal ideations (45.6%) were 4 times greater*** than their non-minority counterparts.

Sexual Minority Status (LGBTQ) and Substance Use

- Sexual minority youth were nearly two times more likely to use tobacco than their non-sexual minority counterparts.
- Approximately 30% of sexual minority youth disclosed using marijuana in the previous 30 days to being surveyed, compared to 16.6% of non-sexual minority youth.
- Sexual minority students were twice as likely to use heroin (11.6%), compared to non-sexual minority youth (6.1%)
- Sexual minority teens disclosed using cocaine at higher rates (7.2%), when compared to non-sexual minority adolescents (5.9%)

Protective Mechanisms Among Paterson Teens

- Family cohesion was an important protective factor for male and females, and among all racial groups. Sexual minority youth reported slightly lower rates of family cohesion (52.3%) compared to non-sexual minority teens (67.1%) and the total sample (65.1%).
- Social support was reported as an important protective mechanism for Paterson's young people. However, African American youth (78.3%) disclosed higher rates of social support than Hispanics (68.8%) and white teens reporting the highest rates (83.4%).
- Sexual minority youth reported lower rates of social support (65.0%) relative to their non-minority peers (72.4%).
- School importance was found to be an important protective mechanism; however, males disclosed the importance of school at lower rates (52.7%) when compared to females (71.3%) and the total sample of adolescents (62.7%).
- Neighborhood sense of community or community attachment was an important protective mechanism suggesting that young people in this sample perceived that adults within their community or neighborhood supported them.

Section 1: Introduction and Background Information

Paterson Coalition Against Substance Abuse (P-CASA) Background

The information contained in this report has been prepared by the Paterson Coalition Against Substance Abuse (P-CASA), which is an anti-drug Coalition targeting at-risk racial and ethnic minority adolescents in Paterson's 1st Ward. Founded in 2013, with federal support from the Drug Free Communities (DFC) Grant Initiative, P-CASA is a collaborative effort between Montclair State University and a diverse group of stakeholders who represent various sectors of the Paterson community (e.g., youth, parents, civic groups, faith-based organizations, schools, social service agencies, law enforcement, and media outlets). P-CASA has introduced evidence-based environmental prevention strategies to meet the goals of the DFC Grant Program, which are to: 1) increase community collaboration; and 2) reduce substance use among youth aged 13–17. The Coalition continues to work closely with various community sectors in its effort to change social norms that promote alcohol and drug use (through a social marketing/social norms campaign), reduce youth access to alcohol and tobacco products (via responsible server training), and support policies that will improve the regulation and oversight of alcohol- and tobacco-selling establishments (through alcohol and tobacco compliance checks). In our ongoing work to mitigate the adverse social and health consequences associated with youth substance use, our ultimate goal is for P-CASA to serve as a model prevention initiative that allows us to expand our scope of services and broaden the impact of our work throughout the entire city.

Description of the Paterson Youth Survey

Part of our mandate is to educate the community regarding substance abuse trends impacting Paterson's young people. To accomplish this task, in the fall of 2014, P-CASA partnered with the Paterson School District's Department of Physical Education and Health and Department of Student Assistance to administer a comprehensive needs assessment survey to 737 high school students. The survey was modeled after the Youth Risk Behavior Surveillance Survey (YRBSS) questionnaire [Centers for Disease Control and Prevention (CDC); Kann et al., 2014] and included questions pertaining to alcohol, tobacco, marijuana, and other illicit drug use (for example, heroin, prescription medicines, cocaine, and crack). Based on the uniformity of our data collection instrument, we were able to derive both state and national comparisons for all the major drug categories. Additional survey questions helped provide a profile of the risk factors that may be contributing to increased substance use among Paterson youth (e.g., family conflict, mental health indicators such as anxiety and depression, and gang involvement). Students were also presented questions

to help identify the protective mechanisms that may serve as a buffer against using drugs and alcohol (e.g., family cohesion, school importance, presence of social supports, and community connection and participation). Youth were sampled from their physical education and health classes, which allowed all students equal opportunity to participate and a probability that a representative sample of the school would be achieved. Both parent-informed consent and student assent were obtained before the survey was administered. Montclair State University's Institutional Review Board (IRB) also approved the survey protocols.

These data collection efforts have played an integral role in increasing much-needed resources for the community and the Paterson School District. More specifically, the data presented herein have been leveraged to obtain additional federal funding to develop and coordinate comprehensive evidence-based substance abuse, HIV, and viral hepatitis (VH) prevention services targeting underserved and at-risk African American and Hispanic individuals, including the following subpopulations: adolescents (13–18), young adults (19–24), LGBTQ, and Men who have Sex with Men (MSM), in the city of Paterson, New Jersey.

Section 2: Demographics

The study sample included 737 high school students between the ages of 13 to 18 and was somewhat evenly dispersed throughout grade levels, which can be seen in Table 1 below. An approximately equal number of males (47%) and females (53%) participated in the study. The racial and ethnic breakdown is as follows: Hispanic (73.3%); African American (11.9%); Arabic/Bengali (10.5%); White (1.6%); and Other Race (2.5%). Compared to U.S. Census data for the entire city of Paterson, it appears that our sample included a greater representation of Hispanic students (73.3% vs. 58%) and fewer African American youth (11.9% vs. 32%). A majority of survey participants (94%) qualified for free or reduced-price lunch, which is an indicator of socioeconomic status.

Table 1: Paterson Youth Survey Demographic Breakdown (N= 737)

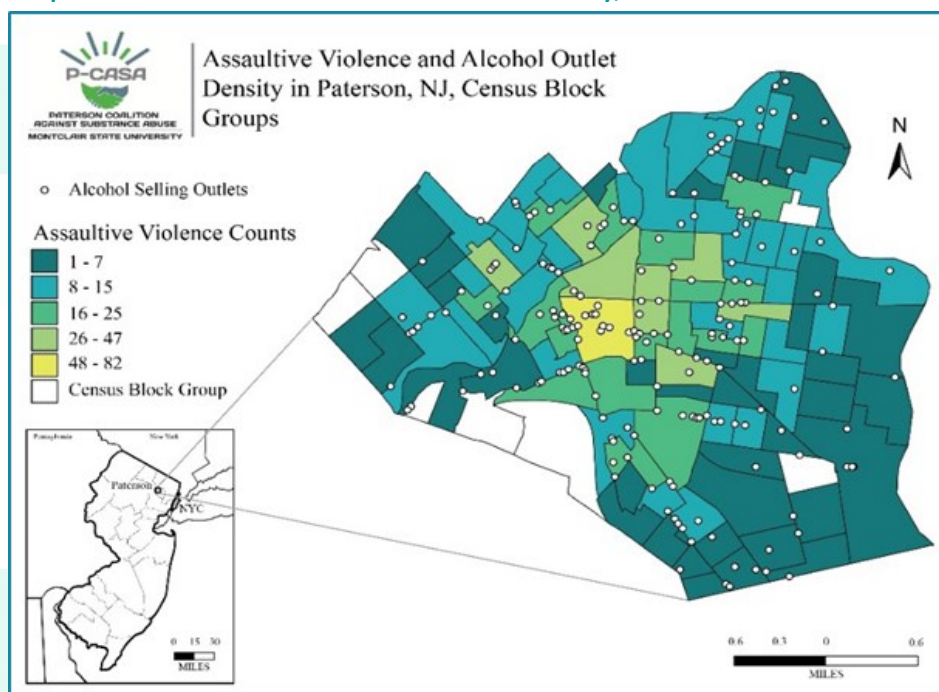
		Frequency	Percentage
Gender			
	Males	346	47.0%
	Females	391	53.0%
Race			
	Hispanic	540	73.3%
	Black	88	11.9%
	Arabic/Bengali	77	10.5%
	White	12	1.6%
	Other Race	18	2.5%
	Native American	2	.3%
Grade			
	9th	117	15.7%
	10th	204	27.7%
	11th	201	27.3%
	12th	215	29.2%
Age			
	13–15	253	34.3%
	16–18	484	65.7%
Free or Reduced Lunch			
	Yes	693	94.0%
	No	44	6.0%

Section 3: Alcohol

Alcohol use in the city of Paterson, New Jersey, is a significant public health concern. According to the most recent data from the Paterson Alcohol Beverage Control (ABC) board, Paterson has approximately 197 licensed alcohol-selling establishments, which is represented by white dots in the map below. According to the New Jersey Division of Alcoholic Beverage Control (ABC), a municipality may issue one consumption license for every 3,000 of its population and one off-premise consumption license for every 7,500 of its population. Based on these limits, the city of Paterson, New Jersey, with 145,948 residents, should not exceed a total of 49 consumption licenses (restaurants and bars), and 19 off-premise licenses (liquor stores and bodegas). **Based on these figures, the city of Paterson has almost 3 times the number of alcohol-selling establishments as recommended by state guidelines.**

The map below shows the rates of assaultive violence and the density of alcohol-selling outlets. Assaultive violence rates were obtained from the Paterson Police Department. This map illustrates that higher incidences of assaultive violence are associated with higher alcohol outlet density. This means, as the number of alcohol retailers increases in a specific section of the community, so does the level of violence. The yellow shading signifies the area of the city where the concentration of alcohol outlets is contributing to increased assaultive violence counts or incidences (i.e., where the 1st and 4th Wards intersect).

Map 1: Assaultive Violence and Alcohol Outlet Density, Paterson NJ



INCREASED
ALCOHOL
OUTLET
DENSITY =

INCREASED
ASSAULTIVE
VIOLENCE

Alcohol use was also measured in 2014 among 737 Paterson high school students, 13 to 18 years of age. Students were asked to respond to questions on 30-day use of alcohol (See Table 2) prior to completing the survey, binge-drinking behavior (5 or more drinks; see Table 3), and perception of risk for using alcohol (See Tables 4 and 5). Between the two largest demographic groups in the sample, Hispanic youth were more likely to engage in alcohol use as well as binge-drinking behavior, when compared to African American/black adolescents. Additional highlights are listed below:

- 30% of surveyed Paterson youth used alcohol before the age of 13, which is nearly twice the rate nationally.
- 20% of the students sampled have used alcohol in the last 30 days.
- Boys (27.7%) were more inclined to binge drink as compared to girls (16.5%).
- The drinking rates (i.e., past 30-day use and binge drinking) were higher for Hispanic students as compared to their racial and ethnic counterparts.
- The highest rates of alcohol use were observed among juniors (32.7), which is nearly a triple increase from freshman year.
- Approximately 38% of the sample believed that alcohol use puts them at “great risk.”
- Paterson youth who drank alcohol during the past 30 days were also 3 times more likely to smoke marijuana before age 14.
- 60% of Paterson youth purchased alcohol from liquor stores.
- 40% of Paterson adolescents also admitted to having adults purchase their alcohol from liquor stores.

Table 2: National 30-Day Alcohol Use Rates among Youth ages 12 to 18

Responses	Total Sample	Males	Females	African American	Hispanic	White
Yes	32.8%	32.8%	33.5%	23.8%	34.4%	35.2%
No	67.2%	67.2%	66.5%	76.2%	65.6%	64.8%

Table3: National Rates of Alcohol Use Before the Age of 13 among Youth ages 12 to 18

Responses	Total Sample	Males	Females	African American	Hispanic	White
Yes	17.2%	19.7%	14.6%	18%	21.3%	11.7%
No	82.8%	80.3%	85.4%	82%	78.7%	88.3%

Table 4: 30-Day Alcohol Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	20%	20.7%	22.8%	15.6%	26.4%	5.7%	0%
No	80%	79.3%	77.3%	84.4%	73.6%	94.3%	100%

Table 5: Binge Drinking (5 or More Drinks)

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	12.9%	27.7%	16.5%	4.2%	14.9%	8.6%	8.3%
No	87.1%	72.3%	83.5%	95.8%	85.1%	91.4%	91.7%

Table 6: Youth Perception of Risk of Using Alcohol

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Great Risk	36.8%	33.1%	39.9%	44.9%	32.3%	60.5%	0%
Moderate Risk	35.1%	32.8%	36.9%	31.6%	38.1%	17.1%	27.3%
Slight Risk	18.9%	20.5%	17.5%	13.3%	20.0%	14.5%	36.4%
No Risk	9.3%	13.6%	5.7%	10.2%	9.6%	7.9%	0%

Table 7: Youth Perception of Parents' Thoughts on Alcohol Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Great Risk	64.5%	63.7%	72.0%	76.8%	63.5%	85.3%	90.9%
Moderate Risk	17.1%	20.8%	16.0%	14.1%	20.1%	10.7%	9.1%
Slight Risk	8.1%	8.7%	8.4%	7.1%	10.3%	1.3%	0%
No Risk	4.9%	6.8%	3.5%	2.0%	6.1%	2.7%	0%



**USED
ALCOHOL
BEFORE
AGE 13**

Section 4: Tobacco, E-Cigarettes, and Hookah

Tobacco use is the leading preventable cause of death and disease in the United States. Although tobacco use across the United States has decreased in the last decade, nearly 4.6 million middle and high school students were identified as current tobacco users in 2014 and approximately 20% were e-cigarette users. National data collected in 2014 identified that among current tobacco users, 13 years of age and older, more than 30% were of Hispanic or African American descent (Hedden et al., 2015). Of youth aged 13 to 17 who smoked, 15% were Hispanic and 8.2% were African American (Hedden et al., 2015). And of those nationally who smoked before the age of 13 (9.3%), 9.2% were Hispanic and nearly 7% were African American (Kann et al., 2014).

Based on recent data collected from the New Jersey division of taxation, Paterson New Jersey has more than 300 licensed tobacco-selling establishments and nearly 200 alcohol retailers in 8.4 square miles. Paterson's 1st Ward has approximately 83 tobacco retailers or 27% of the total number.

Tobacco use was also measured among the sample of 737 Paterson high school students, 13 to 18 years of age, during the fall of 2014. Students were asked to respond to questions on 30-day use of tobacco products and perception of risk for using tobacco products. Percentages of responses are recorded in the following tables. As shown in Tables 6 and 7, Hispanic and African American students were found to engage in lower rates of lifetime use when compared to state and national level results. However, Hispanic students in Paterson were found to use at higher rates during the past 30 days and were also more likely to use tobacco before 13 years of age. Similar results are displayed for African American students. Additional highlights are reported below:

- There appears to be a precipitous increase in tobacco use from freshman (7.4%) to senior year (33.3%).
- Both lifetime use (31%) and past 30-day use (21%) is higher for Hispanic students as compared to their racial counterparts. However, the rates of tobacco use reported by Hispanic adolescents in our sample are lower than both state and national averages.
- Boys were twice as likely to use tobacco products as compared to girls.
- Approximately half of the sample (49.2%) believed that tobacco use would place them at *great risk*.

- Approximately 17.7 % of the students have used e-cigarettes, with seniors reporting the highest percentage of use (14.5%).
- A greater percentage of students seem to be using hookah products (29.6%) as compared to e-cigarettes (17.7%).
- Hookah use appears to be more popular among males (33.7%) and its use occurs more frequently in 10th grade (32.5%).

Table 8: Hispanic Adolescents' Cigarette Use

	Paterson NJ	NJ Data (Hispanics)	NJ Data (Total Population)	National Level (Hispanics)	National (Total Population)
Lifetime Use	31%	41%**	34%**	43%***	41%***
30-Day Use	21%	7.9%*	13%**	15%***	15.7%***
30-Day E-cigarette Use	10%	N/A	N/A	N/A	N/A
Smoked Before Age 13	20%	N/A	5.6%**	9.2%***	9.3%***

(Note: *Data obtained from the New Jersey Prevention Network: Coalition for a Healthy New Jersey; ** Obtained from the 2013 New Jersey Student Health Survey; ***Data obtained from 2013 Youth Risk Behavioral Surveillance; Local data collected in 2014 from a city-wide Substance Abuse Coalition.)

Table 9: African American Adolescents' Cigarette Use

	Paterson NJ	NJ Data (African Americans)	NJ Data (Total Population)	National Level (African Americans)	National (Total Population)
Lifetime Use	20%	28%**	34%**	34%***	41%***
30-Day Use	10%	14.7%*	13%**	8.2%***	15.7%***
30-Day E-cigarette Use	7%	N/A	N/A	N/A	N/A
Smoked Before Age 13	21.5%	N/A	5.6%**	6.7%***	9.3%***

(Note: *Data obtained from the New Jersey Prevention Network: Coalition for a Healthy New Jersey; ** Obtained from the 2013 New Jersey Student Health Survey; ***Data obtained from 2013 Youth Risk Behavioral Surveillance; Local data collected in 2014 from a city-wide Substance Abuse Coalition.)

Table 10: 30-Day Tobacco Use

<i>Responses</i>	Total Sample	Males	Females
Yes	7.3%	11.5%	5.5%
No	79.5%	88.5%	94.5%

Table 11: 30-Day Hookah Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/Bengali	White
Yes	29.6%	33.7%	25.9%	26.6%	30.8%	28.6%	9.1%
No	70.4%	66.3%	74.1%	73.4%	69.2%	71.4%	90.9%

Table 12: Individual Perception of Parents' Thoughts on Risk for Tobacco

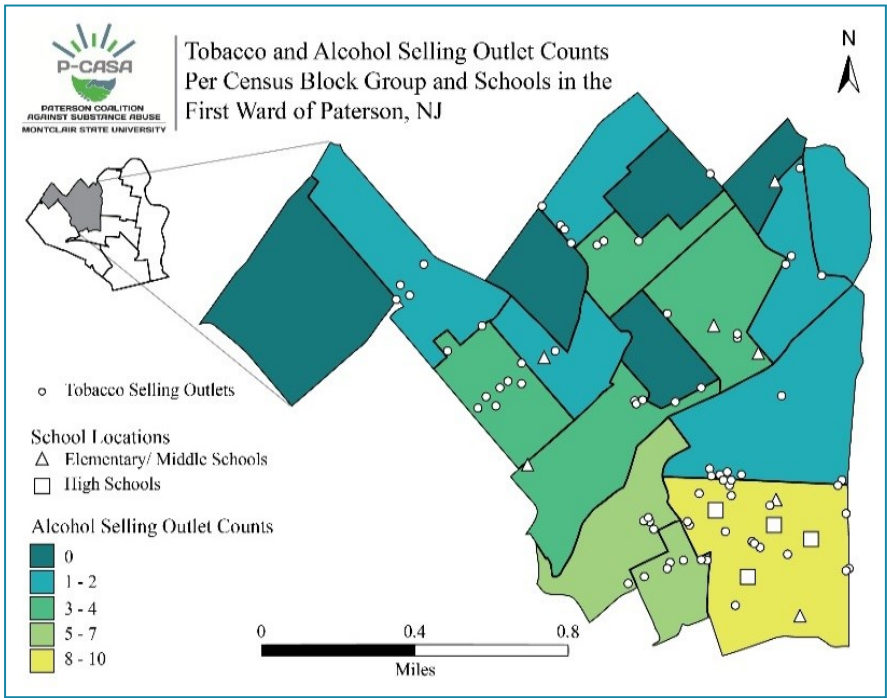
Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/Bengali	White
Great Risk	79.5%	75.1%	83.4%	82.8%	77.7%	86.5%	100%
Moderate Risk	13.6%	15.9%	11.4%	11.1%	14.6%	10.8%	0%
Slight Risk	3.4%	3.7%	3.3%	5.1%	3.4%	1.4%	0%
No Risk	3.4%	5.3%	1.9%	1.0%	4.3%	1.4%	0%

Table 13: Youth Perception of Risk of Using Tobacco

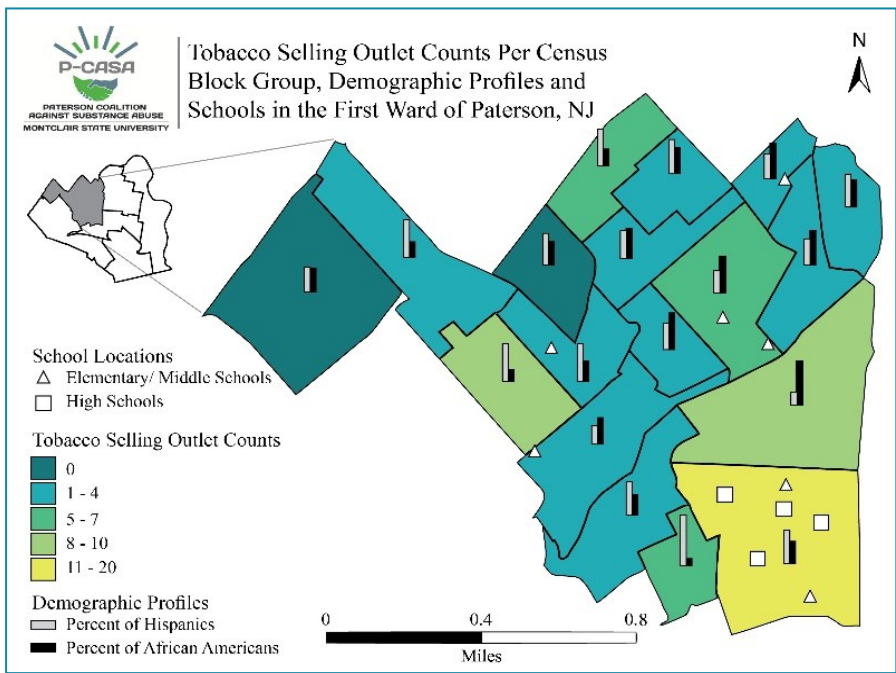
Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/Bengali	White
Great Risk	49.0%	44.6%	52.4%	52.5%	47.5%	56.6%	45.5%
Moderate Risk	25.2%	26.0%	24.6%	23.8%	26.2%	18.4%	27.3%
Slight Risk	14.5%	14.4%	14.7%	11.9%	14.8%	17.1%	18.2%
No Risk	11.3%	15.0%	8.3%	11.9%	11.5%	7.9%	9.1%

In 2015, P-CASA conducted an environmental scan of Paterson’s 1st Ward, which is a method of data collection to gather visible information on local conditions surrounding alcohol, tobacco, and other drug use. Geographic Information System (GIS) mapping was used to identify the relationship between tobacco-selling outlets and the proximity to schools, as well as the demographic groups most affected. Map 2 shows a relationship between the number of alcohol- and tobacco-selling establishments and the number of schools, with the southeast corner of the city being most affected. Map 3 indicates that this relationship appears to have the most deleterious impact on Hispanics, who comprise a higher concentration of residents in the southeast section of Paterson.

Map 2: Schools, Tobacco, and Alcohol Outlets in Paterson, NJ



Map 3: Demographics and Tobacco Outlets in Paterson, NJ



Section 5: Marijuana

According to estimates as of 2014, from the National Survey on Drug Use and Health, marijuana use is estimated to affect 22.2 million Americans aged 13 and older (Hedden et al., 2015). In 2014, marijuana use was observed to be higher among people aged 13 and older than percentages from 2002 to 2013. Among adolescents aged 13 to 17, approximately 7.5% were current marijuana users, or 1.8 million teens (National Survey on Drug Use and Health, 2014), and nearly 40.7% admitted to using marijuana at least once during their lifetimes (YRBS, 2014). The prevalence of having ever used marijuana was highest among black (46.8%) and Hispanic (48.8%) adolescents, with similar rates observed for males and females (YRBS, 2014). Nearly 8.6% of these same young adults tried marijuana before the age of 13, with black (11.5%) and Hispanic (11.7%) adolescents being disproportionately affected (YRBS; Kann et al., 2014).

In the State of New Jersey, between 2009 and 2013, 5.1 percent of adolescents initiated marijuana use within the year prior to being surveyed (SAMHSA, 2014). Of New Jersey teens, 13 to 17 years of age, 75.3% identified no great risk from smoking marijuana once a month. According to data collected from the New Jersey Student Health Survey in 2013, 39% of New Jersey teens admitted to trying marijuana at least once (NJDE, 2014). Black (50%) and Hispanic (41%) adolescents were more likely to use marijuana compared to Asian (22%) and white (39%) teens. Since 2011, no significant change in marijuana use has been observed among New Jersey adolescents.

As of 2014, marijuana use accounted for 17.5% of all hospital substance abuse treatment admissions in Paterson and 10% within Passaic County, New Jersey (Zhu, 2015). According to our survey findings (see tables 12-15), nearly 18% of Paterson teens used marijuana in the past 30 days, with males reporting higher use than females. Higher rates of marijuana use before the age of 13 were also observed for racial and ethnic minority youth—e.g., blacks (33.3%) and Hispanics (29.7%). These rates are nearly double that of the national results discussed earlier.

- Black (33.3%) and Hispanic (29.7%) students reported the highest marijuana use before the age of 13.
- Approximately 42.7% of Paterson youth do not believe that marijuana place them at much risk.
- A significant spike in marijuana use was observed from 9th (8.5%) to 10th (30.5%) grade.
- Regarding past 30-day use, males (21.3%) reported higher rates of marijuana use than females (14.3%).

Table 14: Use of Marijuana Before the Age of 13

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	27.8%	29.8%	25.8%	33.3%	29.7%	11.4%	25.0%
No	82.2%	70.2%	74.2%	66.6%	70.3%	88.3%	75.0%

Table 15: 30-Day Marijuana Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	17.8%	21.3%	14.3%	13.3%	19.5%	11.3%	16.7%
No	82.2%	78.7%	85.7%	86.7%	80.5%	88.7%	83.3%

Table 16: Youth Perception of Risk of Using Marijuana

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Great Risk	31.2%	26.7%	35.5%	21.0%	29.8%	55.3%	36.4%
Moderate Risk	26.1%	24.3%	28.0%	27.0%	26.2%	25.0%	27.3%
Slight Risk	20.2%	19.8%	20.4%	27.0%	20.0%	10.5%	26.4%
No Risk	22.5%	29.1%	16.1%	25.0%	24.0%	9.2%	0%

Table 17: Individual Perception of Parents' Thoughts on Risk of Marijuana Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Great Risk	75.6%	69.5%	81.4%	71.0%	75.6%	83.8%	81.8%
Moderate Risk	14.6%	17.1%	12.2%	23.0%	13.6%	10.8%	9.1%
Slight Risk	4.6%	5.3%	4.1%	4.0%	4.9%	2.7%	9.1%
No Risk	5.2%	8.1%	2.4%	2.0%	5.9%	2.7%	0%



Section 6: Other Illicit Drug Use

Illicit drug use may not be affecting teens in the U.S. as greatly as marijuana or alcohol, but it is no less a public health issue. Drugs such as cocaine, heroin, inhalants, methamphetamine, and ecstasy affect a significant number of U.S. adolescents. In addition, prescription drug use or nonmedical use of prescription medications is one of the nation's fastest-growing drug problems (Office of the National Drug Control Policy, 2016). Among young people in the United States 12 to 17 years of age, 2.2% used heroin, 3.2% used methamphetamines, 5.5% have used cocaine, 6.6% used ecstasy, 8.9% used inhalants, and 17.8% used prescription medications (Kann et al., 2014). Table 16 below illustrates the results from the Youth Risk Behavior Surveillance Survey (2014) for the total sample, gender groups, and racial groups.

Table 18: Youth Risk Behavior Surveillance Results—2014

Illicit Drugs	Total Sample	Males	Females	African American	Hispanic	White
Heroin	2.2%	2.8%	1.6%	1.6%	3.4%	1.7%
Methamphetamine	3.2%	N/A	N/A	1.3%	4.5%	3.0%
Cocaine	5.5%	6.6%	4.5%	2.1%	9.5%	4.8%
Ecstasy	6.6%	7.6%	5.5%	4.4%	9.4%	5.8%
Inhalants	8.9%	7.9%	10.0%	6.8%	11.7%	8.6%
Prescription Medication	17.8%	N/A	N/A	13.3%	19.2%	18.7%

New Jersey data offer similarly interesting results. See Table 17 for results. Overall, New Jersey students

Table 19: New Jersey Student Health Survey—2013

Illicit Drugs	Total Sample
Heroin	2%
Methamphetamine	3%
Cocaine	5%
Ecstasy	7%
Inhalants	10%
Prescription Medication	12%

surveyed in 2013 observed comparable illicit drug use patterns when likened to the above national trends. Again, youth used prescription drugs at the highest rates. When we examined both national and state-level data compared to the results from the Paterson Youth Survey, it is evident that Paterson youth engage in overall similar rates of use. However, most noticeable is that while Paterson youth may use

prescription drugs at lower rates when compared to national and state level trends, they reported to **using heroin at nearly triple the state and national averages**, as displayed in Table 19. Both males and females, and black and Hispanic youth, **were nearly 4 times more likely to use heroin** than youth surveyed nationally. This is particularly troublesome and in need of further attention.

- Both reported cocaine (6.2%) and heroin (6.8%) use for our sample was higher than state and national averages.
- Hispanic youth reported the highest rates of all illicit drug use (e.g., cocaine, heroin, inhalants, methamphetamines, and prescription drugs).
- Males, as compared to females, had higher rates of use across all illicit drug categories.
- Prescription drug use is lower for our sample when compared to state level data (6% vs. 12%).

Table 20: 30-Day Cocaine Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	6.2%	8.2%	4.5%	3.2%	6.9%	5.7%	0%
No	93.8%	91.9%	95.5%	96.9%	93.1%	94.3%	100%

Table 21: 30-Day Heroin Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	6.8%	9.1%	4.5%	4.1%	7.4%	7.1%	0%
No	93.2%	90.2%	95.5%	95.9%	92.6%	92.9%	100%

Table 22: 30-Day Sniffing Glue Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/Bengali	White
Yes	7.5%	9.1%	5.7%	4.1%	8.1%	7.1%	0%
No	92.5%	90.2%	94.3%	95.9%	91.9%	92.9%	100%

Table 23: 30-Day Methamphetamine (Meth) Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	6.5%	9.4%	4.0%	2.1%	8.4%	5.7%	0%
No	93.5	90.6	96.0%	97.9%	92.6%	94.3%	100%

Table 24: 30-Day Prescription Drug Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/Bengali	White
Yes	6.2%	6.8%	5.9%	5.1%	6.3%	5.7%	0%
No	93.8%	93.2%	94.1%	94.8	93.7%	94.3%	100%

Table 25: 30-Day Ecstasy Use

Responses	Total Sample	Males	Females	African American	Hispanic	Arabic/ Bengali	White
Yes	6.3%	8.2%	4.2%	5.2%	6.6%	4.3%	0%
No	93.7%	91.8%	95.8%	94.8%	93.4%	95.7%	100%

Section 7: Mental Health

Mental health conditions are an important public health concern among youth and young adults alike, with more than half of mental disorders beginning by the age of 14 and 75% by the age of 24. In 2014, among teens 13 to 18 years of age, 46.3% experienced some form of a mental disorder (e.g., anxiety, depression, and mood disorders) (National Institute of Mental Health [NIMH], 2016). Among these adolescents, 25.1% experienced an anxiety disorder and 11.4%, or 2.8 million adolescents, had at least one depressive episode in the past year (NIMH, 2016). Among those teens experiencing a depressive episode, 11.5% were Hispanic and 9.1% were African American. Among LGBTQ youth nationwide, estimates reveal that approximately 28.8% to 52.8% of teens experienced depression in 2013 (CDC, 2016)

Suicidal ideations, or suicidal thoughts, are generally associated with depression, anxiety, and other mood disorders. Between 1999 and 2007, suicide rates increased from 10% to nearly 12% per every 100,000 persons (NIMH, 2016). Suicidal ideations have been higher among females, and highest among those 18 to 25 years of age (NIMH, 2016). According to the CDC's Youth Risk Behavior Surveillance survey, it is estimated that 17% of young people nationwide contemplated suicide during the previous 12 months to being surveyed (CDC, 2013). These rates were highest among Hispanic (26.0%) and black (18.6%) females. In addition, rates of suicidal ideations are nearly 3 to 4 times higher for LGBTQ youth and young adults between 10 and 24 years of age; with additional estimates showing that 38% to 65% of transgender youth experience suicidal ideations (National Association for Mental Illness, 2016).

Table 26: Mental Health Rates Nationally, State of New Jersey and in Paterson

Responses	Depression Rates	Anxiety Rates	Suicidal Ideations
National	11.4%	25.1%	17%
New jersey	9.9%	N/A	14%
Paterson (Very True)	25.8%	13.8%	14%
National (LGBTQ)	28.8 to 52.8%	N/A	18.8 to 43.4%
Paterson (LGBTQ)	51.5%	48.1%	45.6%

New Jersey's rates of depression among teens were similar to national percentages in 2013. For example, among New Jersey students, 29% felt sad or hopeless (New Jersey Department of Education [NJDE], 2015), which mirrors estimates found nationally. In addition, 14% of New Jersey teens disclosed experiencing suicidal ideations in the previous 12 months to being surveyed, which is slightly lower than national estimates (17%), (NJDE, 2015).

Paterson high school students responded to questions related to depression, anxiety, and suicidal ideations. Responses are recorded in tables 25-28 below. ***Paterson students experienced higher rates of depression and anxiety when compared to state and national averages.*** Depression rates among Paterson students were double the rate nationally and three times higher when compared to state averages. Anxiety symptoms were lower among Paterson students when compared to national averages. ***LGBTQ students in Paterson experienced the highest rates of depression, anxiety, and suicidal ideations when compared to non-identifying LGBTQ youth.***

- Among the entire sample of Paterson adolescents, a majority disclosed experiencing depression (50.1%) and anxiety (57.1%; somewhat to very true).
- Females reported higher scores (very true) for all mental health indicators when compared to males—e.g., depression (32.8%), anxiety (17.4%), and suicidal ideations (17.6%).
- Hispanic and African American students reported similar rates of depression and anxiety. However, the Hispanic youth who were sampled disclosed more suicidal ideations (16.4%) than their African American or white counterparts.
- 10.3% of Paterson youth reported that they were forced to engage in sexual intercourse.
- However, when rates were broken down to those who only said Yes ($N=74$), approximately 47% were males and 52.7% were females.
- Sexual minority teens reported rates of depression (51.5%) at nearly quadruple the rates of non-sexual minority youth.
- Sexual minority teens' rates of anxiety were approximately 10% greater than that of their non-sexual minority peers.
- ***Sexual minority adolescents' reports of suicidal ideations (45.6%) were 4 times greater*** than their non-sexual minority counterparts.

Table 27: Depression

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non-Sexual Minority
Not True	49.9%	61.2%	40.3%	51.7%	49.6%	66.7%	52.0%	26.0%	54.7%
Somewhat True	24.2%	22.7%	26.9%	24.1%	25.5%	25.0%	27.3%	22.5%	32.8%
Very True	25.8%	16.1%	32.8%	24.2%	24.9%	8.3%	20.7%	51.5%	12.8%

Table 28: Anxiety

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non-Sexual Minority
Not True	42.9%	50.1%	35.8%	44.8%	43.3%	58.3%	35.1%	27.9%	46.6%
Somewhat True	43.3%	39.6%	46.8%	40.2%	43.1%	24.9%	50.7%	24.3%	23.1%
True	13.8%	10.3%	17.4%	15%	13.6%	16.8%	14.2%	48.1%	30.3%

Table 29: Suicidal Ideations

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non-Sexual Minority
No	86.0%	90.8%	82.4%	91.7%	83.6%	100%	93.2%	54.4%	90.1
Yes	14.0%	9.2%	17.6%	8.3%	16.4%	0	6.8%	45.6%	10.1%

Table 30: Forced Sexual Intercourse

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non-Sexual Minority
Yes	10.3	10.2	10.1	8.0	10.6	8.3	9.1	10.8	10.5
No	89.7	89.8	89.9	92.0	89.4	91.7	90.9	89.2	89.5

Section 8: Sexual Minority Status and Substance Abuse

Sexual Orientation and Gender Identity. Among our sample, approximately 10.5% of the youth self-identified as lesbian, gay, bisexual, transgender, or questioning (LGBTQ). This percentage is much higher than national estimates, in which 3.5% of individuals identify as lesbian, gay, or bisexual, and approximately .3% as transgender (Gates, 2011).

The LGBTQ community reports higher rates of drug, alcohol, and tobacco use than the general population of the United States and their non-minority counterparts. Many LGBTQ youth experience multiple factors that contribute to their substance using behaviors, such as prejudice, discrimination, lack of peer support, and healthcare system discrimination. According to the CDC and the National Association for Mental Illness (NAMI), it is estimated that 20 to 30% of LGBTQ individuals abuse substances, when compared to only 9% of the general U.S. population. Sexual minority youth reported higher rates of use for alcohol and across all drug categories.

- Sexual minority youth were nearly two times more likely to use tobacco than their non-sexual minority counterparts.
- Approximately 30% of sexual minority youth disclosed using marijuana in the previous 30 day to being surveyed, compared to 16.6% of non-sexual minority youth.
- Sexual minority students were twice as likely to use heroin (11.6%), compared to non-sexual minority youth (6.1%)
- Sexual minority teens disclosed using cocaine at higher rates (7.2%), when compared to non-sexual minority adolescents (5.9%)

Table 31: 30-Day Alcohol Use Between Sexual Minority and Non-Sexual Minority Youth

Responses	Sexual Minority	Non-Sexual Minority
Yes	26.5%	22.1%
No	73.5	77.9

Table 32: 30-day Tobacco Use Between Sexual Minority and Non-Sexual Minority Youth

Responses	Sexual Minority	Non-Sexual Minority
Yes	14.5%	7.9%
No	85.5%	92.7%

Table 33: Prescription Drug Use Between Sexual Minority and Non-Sexual-Minority Youth

Responses	Sexual Minority	Non-Sexual Minority
Yes	8.7%	5.9%
No	91.3%	94.1%

Table 34: 30-day Marijuana Use Between Sexual Minority and Non-Sexual minority Youth

Responses	Sexual Minority	Non-Sexual Minority
Yes	29.0%	16.6%
No	71.0%	83.4%

Table 35: Cocaine Between Sexual Minority and Non-Sexual Minority Youth

Responses	Sexual Minority	Non-Sexual Minority
Yes	7.2%	5.9%
No	92.8%	94.1%

Table 36: Heroin Use Between Sexual Minority and Non-Sexual Minority Youth

Responses	Sexual Minority	Non-Sexual Minority
Yes	11.6%	6.1%
No	88.4%	93.9%

Section 9: Protective Mechanisms Among Paterson Teens

Protective Mechanisms provide a protective effect, either strengthening or guarding an individual from risks or a compensatory effect, which functions as a buffer against negative-health-seeking behaviors. The Paterson Youth Survey was structured to assess several protective mechanisms that may be present in their lives. Each of these protective factors serves a similar function, to protect young people from negative health consequences and other adverse health outcomes, such as mental illness.

Family Cohesion - the emotional bond to the family and toward each member.

Social Support - additional sources of support, guidance, and emotional connection, such as teachers, peers, other school personnel, or other kin or non-kin adults.

School Importance - the emotional or perceived attachment students have to their school and the level of support, guidance, and protection they receive from their institution. It also encompasses the importance prescribed to grades and future educational endeavors (i.e., attending college).

Neighborhood Sense of Community/Community Attachment - perceived feelings of belongingness and a shared belief that community members will meet one another's needs through these relationships.

Overall, Paterson students reported higher levels of access to protective mechanisms as highlighted in tables 35–38 below:

- Family cohesion was an important protective factor for male and females, and among all racial groups. Sexual minority youth reported slightly lower rates of family cohesion (52.3%) compared to non-sexual minority teens (67.1%) and the total sample (65.1%).
- Social support was reported as an important protective mechanism for Paterson's young people. However, African American youth (78.3%) disclosed higher rates of social support than Hispanics (68.8%) and white teens reporting the highest rates (83.4%).
- Sexual minority youth reported lower rates of social support (65.0%) relative to their non-minority peers (72.4%).
- School importance was found to be an important protective mechanism; however, males disclosed the importance of school at lower rates (52.7%) when compared to females (71.3%) and the total sample of adolescents (62.7%).

- Neighborhood sense of community or community attachment was an important protective mechanism suggesting that young people in this sample perceived that adults within their community or neighborhood supported them.

Table 37: Family Cohesion

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non–Sexual Minority
Low	34.9%	33.3%	35.9%	32.2%	36.5%	41.6%	28.6%	47.7%	32.9%
Medium to High	65.1%	66.6%	64.1%	67.8%	63.5%	88.4%	71.4%	52.3%	67.1%

Table 38: Social Support from Parents, Teachers, Peers, and other Adults

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non–Sexual Minority
Low	28.9%	28.8%	28.2%	21.7%	31.2%	16.6%	22.1%	35.0%	27.6%
Medium to High	71.1%	71.2%	71.8%	78.3%	68.8%	83.4%	77.9%	65.0%	72.4%

Table 39: School Importance

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non–Sexual Minority
Low	37.3%	47.3%	28.7%	40.7%	37.6%	58.0%	15.6%	15.3%	18.2%
Medium to High	62.7%	52.7%	71.3%	59.3%	62.4%	42.0%	84.4%	84.7%	81.8%

Table 40: Community Attachment (Neighborhood Sense of Community)

Responses	Total Sample	Males	Females	African American	Hispanic	White	Other	Sexual Minority	Non–Sexual Minority
Low	33.8%	30.1%	37.0%	35.5%	36.1%	25.0%	20.8%	25.5%	18.9%
Medium to High	66.2%	69.9%	62.3%	64.5%	63.9%	75%	79.2%	74.8%	81.1%

References

- Hedden, S. L., Kennet, J., Lipari, R., Medley, G., P., T., Copello, E. A. P., & Kroutil, L. A. (2015). *Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health*. (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Rockville, MD: Center for Behavioral Health Statistics and Quality.
- Kann, L., Kinchen, S., Shanklin, S. L., Flint, K. H., Hawkins, J., Harris, W. A., . . . Zaza, S. (2014). *Youth Risk Behavior Surveillance—United States, 2013*. Atlanta, GA: Centers for Disease Control and Prevention.
- National Association for Mental Illness (2016). *How do mental health conditions affect the LGBTQ community?* Retrieved from <https://www.nami.org/Find-Support/LGBTQ>.
- National Institute of Mental Health (2016). *Mental health information*. Retrieved from <https://www.nimh.nih.gov/health/topics/index.shtml>.
- New Jersey Department of Education [NJDE]. (2013). *New Jersey Student Health Survey*. Trenton, NJ: Division of Student Services and Career Readiness Retrieved from www.nj.gov/njded/students/yrbs/index.html.
- Substance Abuse and Mental Health Services Administration. (2014). *Behavioral health barometer: New Jersey 2014*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Zhu, L. (2015). *New Jersey drug and alcohol abuse treatment: Substance abuse overview 2014 Passaic County*. Trenton, NJ: Division of Mental Health and Addiction Services.