

Consumption and Perceptions Among  
Anne Arundel County Youth Ages 12-20

# SUBSTANCE USE

September 1, 2013 Survey Report



**Substance Use:**  
**Consumption and Perceptions Among**  
**Anne Arundel County Youth Ages 12-20**  
**September 1, 2013 Survey Report**

Anne Arundel police on Monday reported breaking up an underage drinking party at a Severna Park residence, where nearly two dozen juveniles were charged, including one that police said fell out of a second story window as he attempted to avoid detection. It marked the third time in four months that police had been called to the residence...All of the juveniles who had alcohol in their possession were under the legal drinking age, police said...The homeowner was not there at the time, police said...In all, 22 male and female juveniles between ages 14 and 17 were cited for violating underage liquor laws, police said. Parents were notified, and the juveniles were kept at the residence until parents arrived due to their various states of intoxication, police said. (Joe Burns, *Police Break up Underage Drinking Party in Severna Park*, The Baltimore Sun, March 25, 2013.)

**Introduction**

Anne Arundel County (AAC) adolescents and young adults who use alcohol or illegal substances increase their risk for health and social problems, delinquency and diminish their personal achievement. The AAC Department of Health (AACDOH), Bureau of Behavioral Health's Prevention and Education Services provides evidence-based programs to increase awareness of the nature, extent and risks of drug and alcohol abuse in AAC.

The community benefits from Prevention and Education Services by accessing accurate facts concerning drug and alcohol abuse, its health risks and the impact on the community. Increased awareness leads to a solid basis for targeted activities that can be implemented by local drug and alcohol community coalitions.

In AAC, local community coalitions work to eliminate underage drinking, alcohol-related crashes and binge drinking by mobilizing residents to implement environmental prevention strategies. The Coalition for Safe Communities (CSC) is a federally funded Drug Free Community grantee that works county-wide through the AAC Partnership for Children Youth and Families (AACPCYF). The Northern Lights Against Substance Abuse (NLASA) and the Western Anne Arundel Substance Abuse Prevention Coalition (WASP) are two local coalitions of concerned citizens whose mission is to prevent alcohol and other drug use among youth and to promote safe and healthy behaviors. NLASA focuses its efforts in Pasadena, Glen Burnie, Curtis Bay and Brooklyn Park. WASP focuses its efforts on the Fort Meade, Severn, Hanover, Jessup, Laurel and Odenton ZIP code areas.

Community coalitions in AAC are comprised of volunteers who represent sectors of interest such as law enforcement, education, health and medicine, social services, faith-based groups, mental health and treatment services, community groups, parents, youth and government. Coalition meetings are held monthly. The cross-sector dialogue provides a lively and informative forum about local data and community events. Coalitions plan and implement effective evidence-based strategies. The 2013 Substance Abuse Consumption and Perception Survey was planned, implemented and analyzed by the CSC, NLASA and WASP, and it is an example of a broadly supported and locally-led data collection initiative that quantifies the substance consumption and perceptions of AAC youth ages 12-20.

### **Purpose of the 2013 Substance Abuse Consumption and Perception Survey**

The AACDOH in partnership with the AACPCYF, the CSC, NLASA and WASP, conducted a Substance Abuse Consumption and Perception Survey of youth in AAC. The 2013 Substance Abuse Consumption and Perception Survey was designed to assess youths' alcohol, tobacco, marijuana and prescription drug use and their perceptions about the severity of harm and risks associated with using these substances in our local community. Data collected from the 2013 Substance Abuse Consumption and Perception Survey has established a baseline in AAC by ZIP code against which the effectiveness of prevention strategies can be measured.

The process of completing a survey can be educational and insightful because it causes the respondent to pause and think about the issues. Therefore, a secondary purpose of the survey was to raise personal awareness of one's own patterns and beliefs about substance abuse.

### **Survey Methods and Limitations**

The survey was developed by the AACPCYF and the AACDOH in consultation with researchers from the University of Maryland, School of Pharmacy and the Federal Substance Abuse and Mental Health Services Administration's (SAMHSA) Drug Free Communities (DFC) Initiative. The surveys were administered person-to-person in a wide variety of settings and in conjunction with substance abuse prevention activities. The survey was administered by coalition members, teachers and community volunteers between October 2012 and May 2013. Surveys were conducted in conjunction with the distribution of information about alcohol and drugs, and in most cases, a discussion about substance abuse.

Survey locations spanned the county and included the Arnold, Glen Burnie Town Center and Arundel Mills campuses of the Anne Arundel Community College, Strengthening Families Prevention Programs, Teens in Partnership leadership groups, Meade High School, Meade Middle School, Arundel Middle School, North County High School, Northeast High School, Glen Burnie High School, Chesapeake High School, Archbishop Spalding High School, high school basketball games, a dance competition, a Zumba class, after-prom celebrations, three retail malls and community gatherings.

The survey was administered by volunteer coalition members in areas of AAC where youth and young adults were expected to congregate. Data in the northern and western areas of the County was needed to secure future funding; therefore, data collection in those areas was the primary

focus of survey collection. Consequently, there is an uneven distribution of survey results in some central and southern AAC ZIP codes and therefore a potential for a sampling bias. The following areas with less than 10 survey respondents are not included in the graphs: North Beach, Harmans, Galesville, Naval Academy, Friendship, and Mayo.

A total of 5,470 valid surveys were collected from AAC youth and young adults ages 12-25. Of the 5,470 total surveys, 4,500 (82.3 percent) were collected from AAC youth ages 12-20. For this analysis, the public health implications of the illegal, underage consumption of alcohol was of interest. Therefore, the 21-25 year olds were omitted from this analysis because they can legally purchase and drink alcohol.

The survey included responses from two middle schools in West County. The consumption levels for both of the middle school ages were very low statistically. Therefore the middle school data were excluded from this analysis so the overall County consumption rate would not be affected by the middle school low consumption level.

This report contains key findings tabulated and extracted from the survey responses of AAC youth ages 12-20. The following table shows the number of surveys from each ZIP code for youth ages 12-20.

**Sample Size of 12-20 Year Olds by Area Surveyed**

<b>Area Surveyed in AAC</b>	<b>ZIP code</b>	<b>12-20 Year Olds Sample Size</b>
Annapolis	21401	93
Arnold	21012	24
Brooklyn	21125	217
Cape St. Claire	21409	24
Churchton	20733	18
Crofton	21114	50
Crownsville	21032	25
Curtis Bay	21226	83
Davidsonville	21035	56
Deale	20751	16
Dunkirk	20754	13
Eastport	21403	59
Edgewater	21037	163
Friendship	20758	2
Ft. Meade	20755	112
Galesville	20765	0
Gambrills	21054	27
Glen Burnie East	21060	194
Glen Burnie West	21061	449
Hanover	21076	100
Harmans	21077	4
Harwood	20776	27
Jessup	20794	13
Laurel	20724	182
Linthicum	21090	108
Lothian	20711	37
Mayo	21106	1
Millersville	21108	76
Naval Academy	21409	0
North Beach	20714	2
Odenton	21113	132
Pasadena	21122	1484
Riva	21140	16
Severn	21144	252
Severna Park	21146	90
Shadyside	20764	26
Tracy's Landing	20779	10
West River	20778	14

## Section One

### Alcohol Consumption and Perception of Risk and Harm

On Thursday, July 11, 2013, at approximately 1:00 a.m., members of the Anne Arundel County Police Department responded to Anne Arundel Medical Center in response to a report of a subject who was brought into the hospital suffering from head injuries.

Upon the officers' arrival, it was determined that the 19-year-old female victim was transported to the hospital by friends. Initial investigation revealed that the victim had been attending a party... in Riva and had allegedly fallen down a flight of stairs. Evidence indicated the victim was under the influence of alcohol. Additionally, numerous other individuals under the legal drinking age were apparently under the influence of alcohol.

Officers immediately responded to the above location and secured the residence. There were several subjects located at the residence. The Criminal Investigation Division was notified and several detectives responded to initiate an investigation. All individuals on the scene were interviewed and the scene was processed for evidence.

The 19-year-old female victim is currently at Shock Trauma in Baltimore listed in critical condition. (EOE Staff, *Underaged Drinking Party Sends Teen To Shock Trauma In Critical Condition*, [Eye on Annapolis](#), July 11, 2013.)

#### A. Background Research About Alcohol

In 2012, the Substance Abuse and Mental Health Services Administration (SAMHSA) found 26.6 percent of youth ages 12-20 drank alcohol in the past month.<sup>i</sup> Anne Arundel County's average rate is 27 percent, which is higher than the national average. However, local data show that there are pockets of consumption that further outpace the national average. Youth ages 12-20 report between 15 percent and 48 percent drank alcohol in the past month, with 15 ZIP codes reporting higher consumption percentages than the national rate.<sup>ii</sup>

A person can legally purchase alcohol in the United States at the age of 21. Even though parents may legally give an alcoholic beverage to their own child for personal or religious purposes, drinking alcohol under the age of 21 and providing alcohol to a person who is under the age of 21 are illegal. The legal rationale has its public policy roots in solid public health research.

Underage drinking is a public health problem because alcohol is the most commonly used drug among underage youth across the United States<sup>iii</sup>. Alcohol is used more than tobacco and other illicit drugs among youth, and is responsible for more than 4,700 annual deaths among underage youth.<sup>iv</sup>

Binge drinking is defined as five or more drinks for men; or four or more drinks for women in a two hour period. The federal Centers for Disease Control and Prevention (CDC) calculates that binge drinkers are responsible for more than half of the 79,000 annual alcohol-related deaths in the U.S. and for two-thirds of the 2.3 million years of potential life lost in 2001-2005.

Most binge drinkers are not alcohol dependent or addicted to alcohol. Binge drinking prevalence nationwide and in Maryland increased with household income and was most commonly reported by respondents with annual household incomes of \$75,000 or more (19.3 percent). The greater prevalence of binge drinking with increasing income levels probably reflects the fact that adults with higher household incomes have more disposable income available to spend on alcohol.<sup>v</sup>

Teenagers who drink alcohol often drink to excess. This behavior often leads to many destructive consequences including motor vehicle crashes, injuries, homicides, and suicides. According to the Mayo Clinic, underage drinking hospitalizations cost \$755 million in the U.S. each year.<sup>vi</sup> The short-term health risks that are associated with binge drinking are drunk driving, passing out, hangovers, risk of HIV and other sexually transmitted diseases, and unintended pregnancies.

Longer-term effects of drinking include legal and social problems. Chronic alcohol use increases the risk of liver disease, heart disease, cancer, high blood pressure, neurologic damage, stroke and other chronic diseases.<sup>vii</sup> Cancer and heart disease are two common causes of death for AAC residents ages 10-24.<sup>viii</sup> In 2010, a total of 1,837 hospital emergency department visits for AAC residents ages 10-24 were related to drugs or alcohol.<sup>ix</sup>

Research shows that a young person's brain is not fully developed until age 25. Alcohol use in young people can have a detrimental impact on the still developing brain, particularly the areas that control inhibitions, emotions and form new memories. The areas of the brain affected are the cerebellum, limbic system, and the cerebral cortex. The cerebellum is the area of the brain that controls motor coordination. Damage to this area causes loss of balance and stumbling. The limbic system monitors a variety of tasks including memory and emotion. The cerebral cortex affects the abilities to think, plan, behave intelligently and interact socially. This area also connects the brain to the rest of the nervous system.<sup>x</sup> Alcohol use can affect the normal development of these areas, resulting in related social, emotional and psychological problems as the person grows and develops.

Early onset of alcohol use is associated with a greater likelihood of developing alcohol abuse or dependence at a later age. Those who first used alcohol at or before the age of 14 were nearly four times more likely to meet the criteria for past year alcohol abuse or dependence than those who started using alcohol between the ages of 18-20. They were also six times more likely to meet the criteria than those who started using alcohol at or after age 21.<sup>xi</sup>

Though not all drinkers are or will become alcoholics, alcoholism is a *chronic* disease. This means that it develops gradually over a period of time, sometimes years. Alcoholism is a *progressive* disease as well, meaning that it always gets worse without treatment. Personality changes may result from the neuropsychological impairments to the person's cognitive and affective functioning. They think, feel, and behave differently than previously, yet regard their functioning as normal. As a result, social or relationship problems often arise within the family,

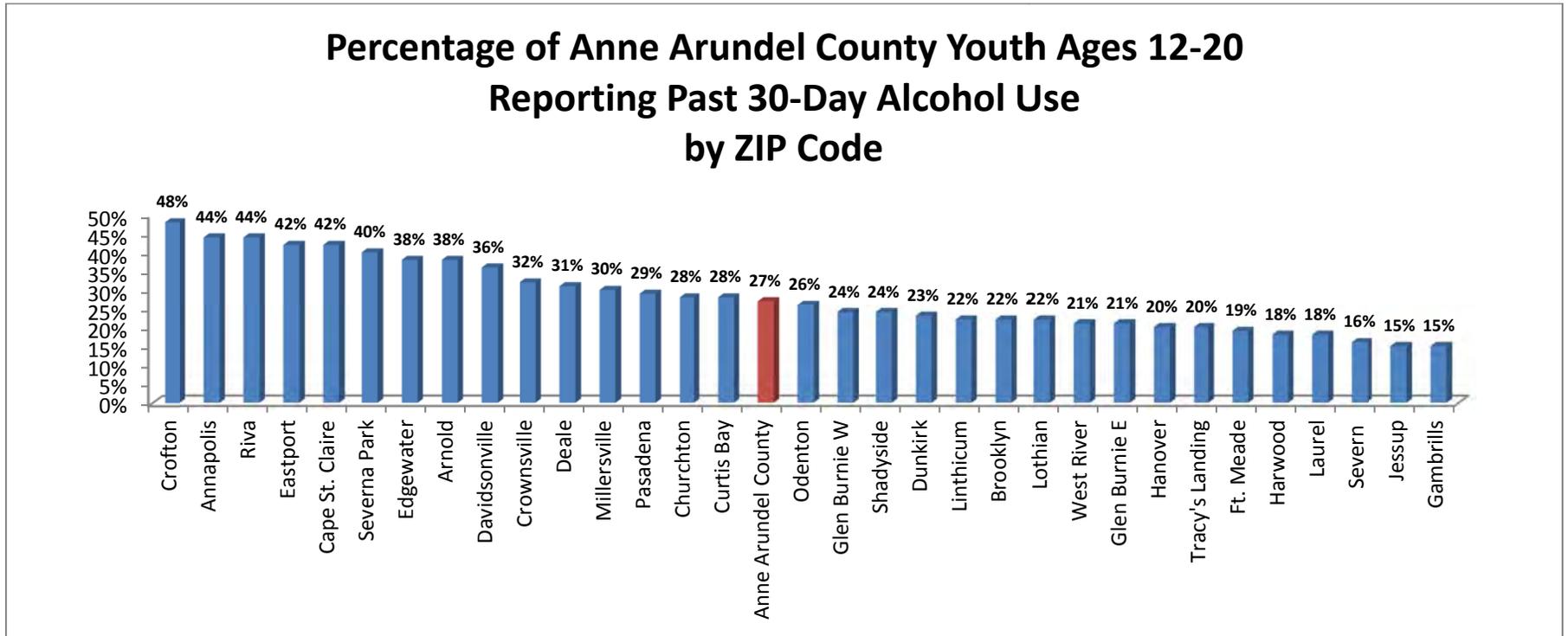
the community and at work. Sometimes family life deteriorates to the point that treatment for family members is necessary for their own recovery.<sup>xii</sup>

Many medical organizations support the disease concept of alcoholism including: American Academy of Family Practice, American Hospital Association, American Medical Association, American Medical Society of Alcoholism, American Psychiatric Association, American Psychological Association, American Public Health Association, National Council on Alcoholism and the World Health Organization.

Parents who do not discourage underage drinking may have an indirect influence on young people's alcohol use. Research also shows that when youths perceive that their peers think it is wrong, then they are less likely to use substances.<sup>xiii</sup> Studies have shown that parents are more important than school in preventing the use of alcohol and marijuana. Studies show that school programs are definitely valuable, but parents play an important role by creating family social-capital and bonds that shape the decisions their children make.<sup>xiv</sup>

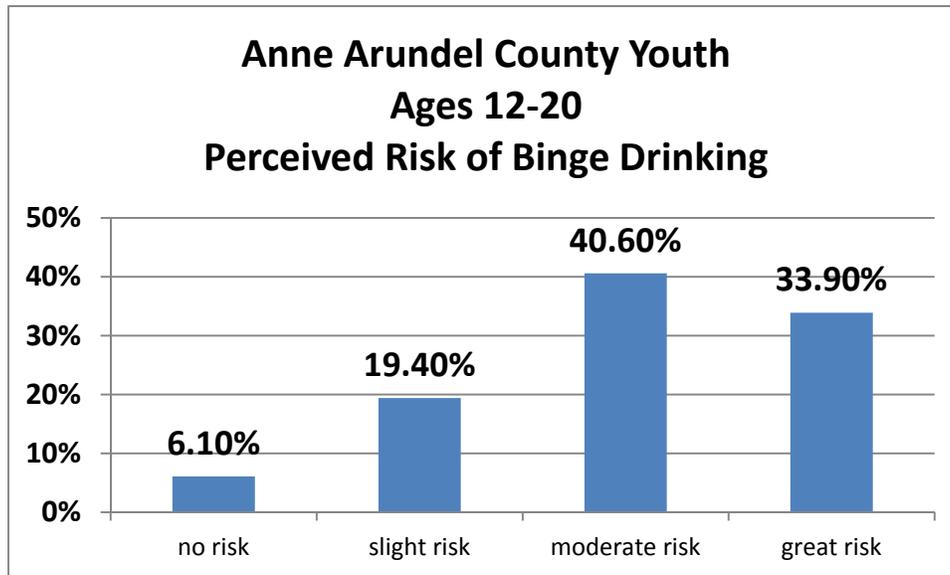
To reduce the prevalence of this dangerous behavior in youth, parents are encouraged to understand the seriousness of the problem and overcome the perceived barriers they face when talking to their children about underage drinking. Parents are encouraged to become knowledgeable of their children's use of social media sites. Forty percent of U.S. youth report seeing pictures of their peers getting drunk, passed out or using drugs on social networking sites.<sup>xv</sup> Additionally, social networking sites are being used to promote, advertise or change the location of an underage drinking event. Providing parents with knowledge, tools and confidence is necessary to help them start the conversation about alcohol use with their children.<sup>xvi</sup>

**B. 30-Day Use: During the past 30 days did you drink one or more drinks of an alcoholic beverage?**



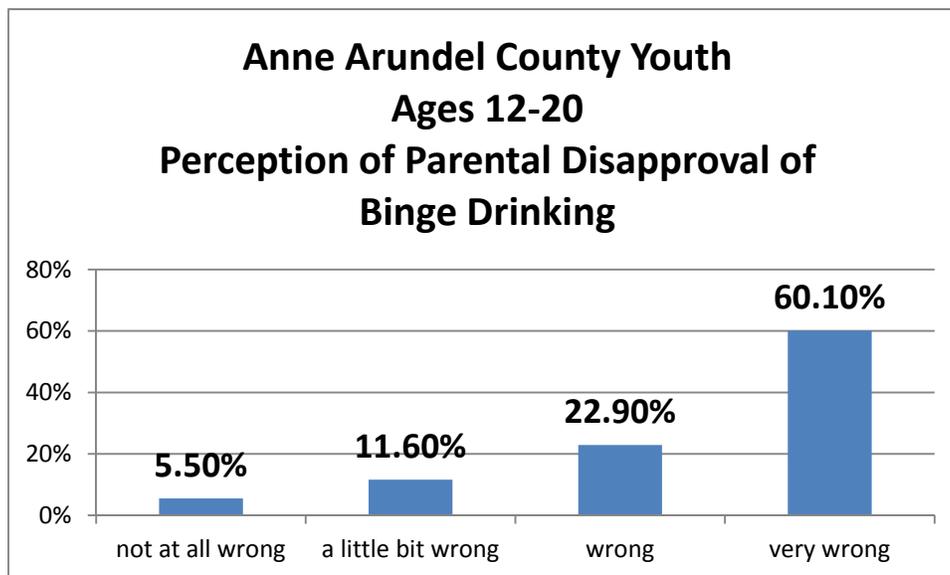
In AAC, youth surveyed reported 30-day use of alcohol that varies by ZIP code area between 15% and 48%.

**C. Perception of Risk: How much do you think people risk harming themselves physically or in other ways when they have five or more drinks of an alcoholic beverage once or twice a week?**



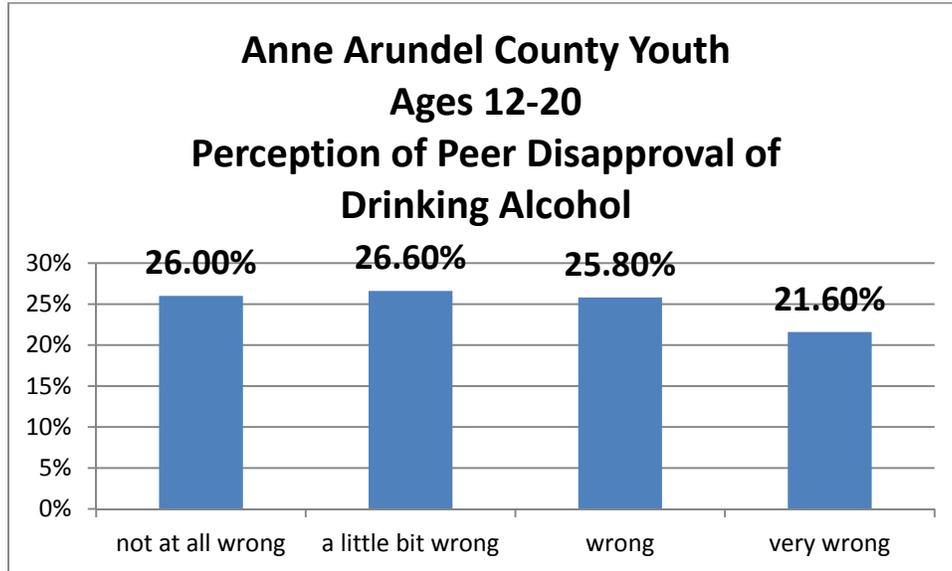
Research shows that if a youth perceives a lower risk, the likelihood of alcohol use increases. In AAC, the majority of youth surveyed report that the risk of binge drinking is moderate or great (74.5%).

**D. Perception of Parental Disapproval: How wrong do your parents feel it would be for you to have one or two drinks of an alcoholic beverage nearly every day?**



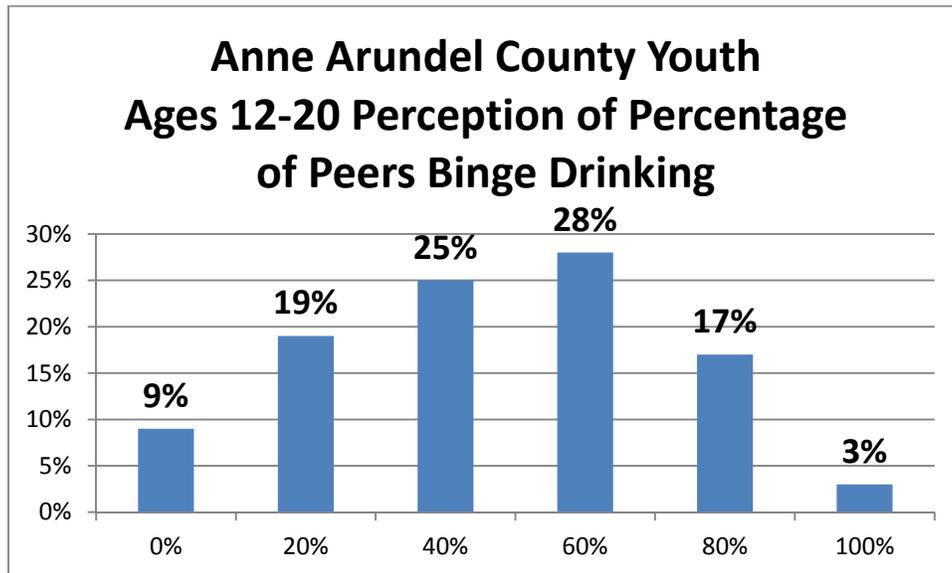
Research shows that parental disapproval decreases youth's alcohol use. The majority of AAC youth surveyed report that parents would say binge drinking is wrong or very wrong (83%).

**E. Perception of Peer Disapproval: How wrong do your friends feel it would be for you to have one or two drinks of an alcoholic beverage nearly every day?**



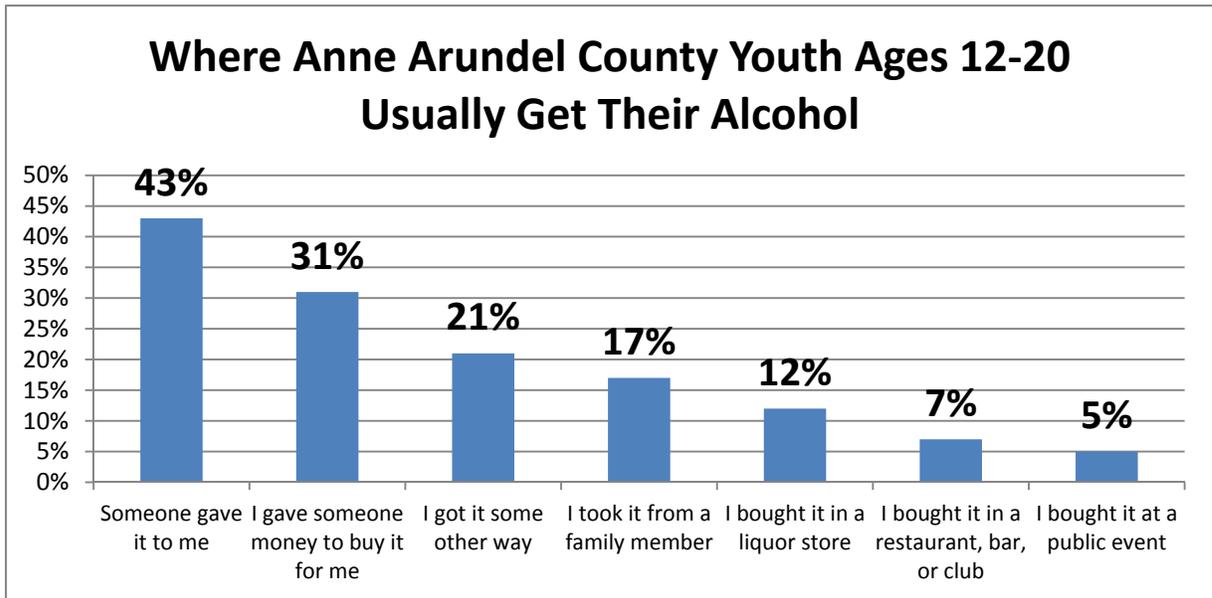
Research shows if youth perceive their peers think substance use is wrong, they are less likely to use substances. In AAC, a little over half (52.6 %) of youth surveyed report their peers would say drinking alcohol is not at all wrong or a little bit wrong.

**F. What percentage of students your age do you believe drank five or more drinks in a row at least once within the past 30 days?**



On average, AAC youth surveyed think 40%-60% of their peers are binge drinking when in reality the number of youth who reported any alcohol use in the last 30 days was much lower (average 27%).

**G. During the past 30 days, how did you usually get the alcohol you drank?**



Of the 4,467 youth responses, 2,990 responded indicating that they did not drink alcohol in the last 30 days. Of the 1,477 youth that reported they drank alcohol in the last 30 days, the highest percentage of youth (43%) reported “someone gave it to me.” The second highest response was “I gave someone money to buy it for me” (31%). Youth purchasing alcohol from liquor stores, restaurants, bars, clubs or public events was reported less often. Some individual youth listed more than one response to this question. Some individual youth listed an answer to this question, yet responded in other parts of the survey that they did not drink alcohol in the past 30 days.

## Section Two

### Tobacco Consumption and Perception of Risk and Harm

Anne Arundel County police and Broadneck High School officials say they are cracking down on "the pit," an area near the school in Cape St. Claire where residents have complained of loitering, fights and illegal drug use. More than a dozen people, mostly teenagers under age 18, have been charged or issued citations so far...On Feb. 12, five juveniles were issued civil citations alleging they were underage in possession of tobacco. And on Tuesday, police said, they charged a 23 [year old male] and two 15-year-old females with having dangerous weapons and possession of drug paraphernalia after finding six knives — one with a 14-inch blade — as well as five "smoking devices" and two packages of suspected synthetic marijuana in the car they were in. (Andrea F. Siegel, *Police Crack down on Cape Saint Claire 'pit' in Anne Arundel*," The Baltimore Sun, February 28, 2013.)

#### A. Background Research About Tobacco

A healthy life includes not smoking. Tobacco use is associated with shortness of breath, poor lung function, respiratory illnesses, cardiovascular problems, hearing problems, multiple types of cancers and addiction. According to the National Health Interview Survey, nearly one-third of current smokers began smoking when they were age 15 or younger compared to 17 percent who started smoking at age 21 or older.<sup>xvii</sup>

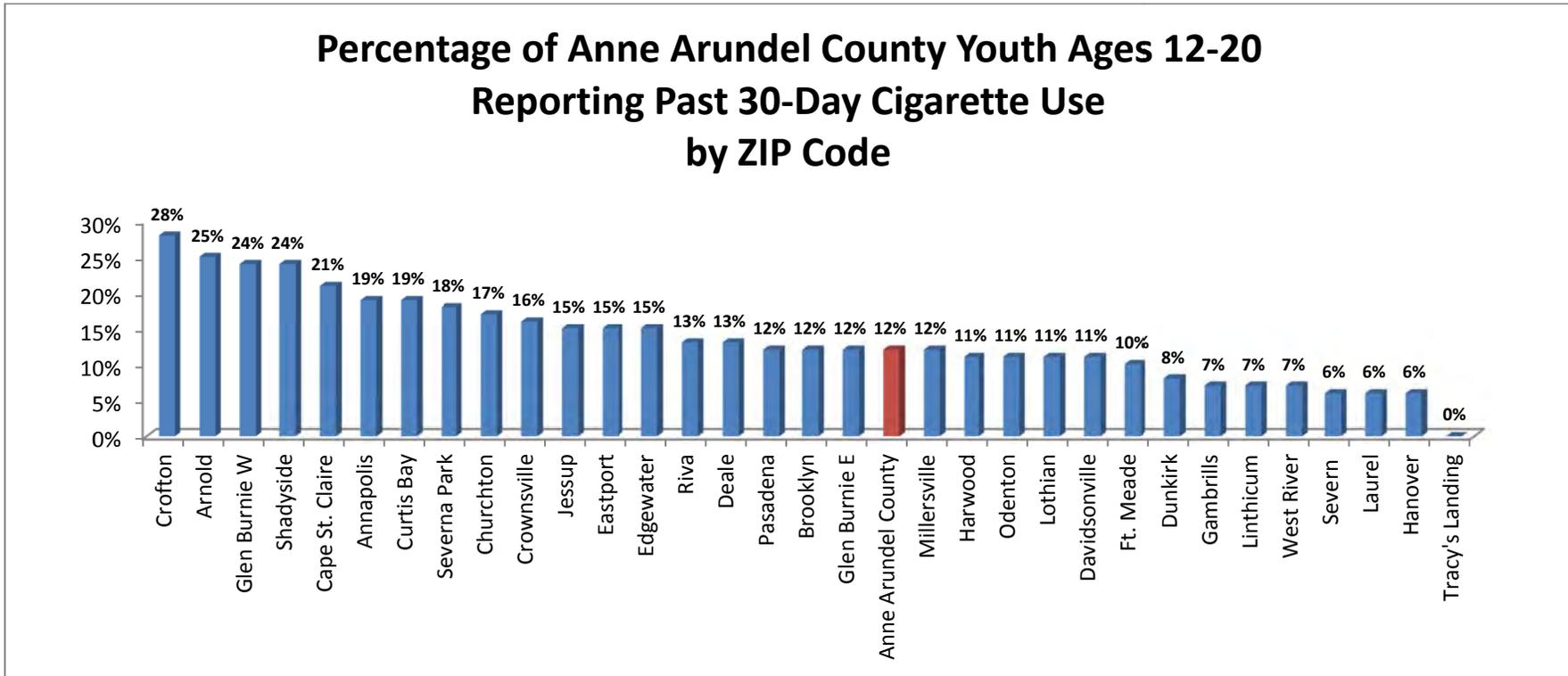
Teen smoking affects the body while it is still undergoing significant growth and development. People who smoked between the ages of 12 and 39 were more likely to die before the age of 55.<sup>xviii</sup> Smoking has been linked with brain changes and memory decline.<sup>xix</sup> Many illegal, addictive and harmful substances are delivered to the body by smoking, such as nicotine and over 4000 chemical agents including at least 50 carcinogens. Smoking can be a gateway substance that can lead to marijuana, hashish, synthetic marijuana, crack cocaine and heroin.<sup>xx</sup>

Smoking prevention efforts have taken place since the 1960s. Changes to state and federal laws have targeted youth access to tobacco products, including increases in tobacco taxes and prohibitions of sales to minors under 18 years of age. In addition, state and local laws have prohibited smoking in public indoor locations, including workplaces, hotels, restaurants and bars. In Maryland, the Clean Indoor Air Act was passed in 2007, restricting smoking in restaurants and bars. Such laws protect the health of residents by limiting the exposure to environmental tobacco use.

In AAC, the Department of Health's Learn To Live Program has raised awareness about the risks of tobacco use. The program includes education and information to help prevent underage tobacco use. Teen Tobacco Prevention is a forum that was created to speak with teens about the dangers of smoking and about resources to keep them smoke-free. Smoking Stinks is an interactive website for youth that provides facts, games and tools targeted to children of different ages to prevent tobacco use.

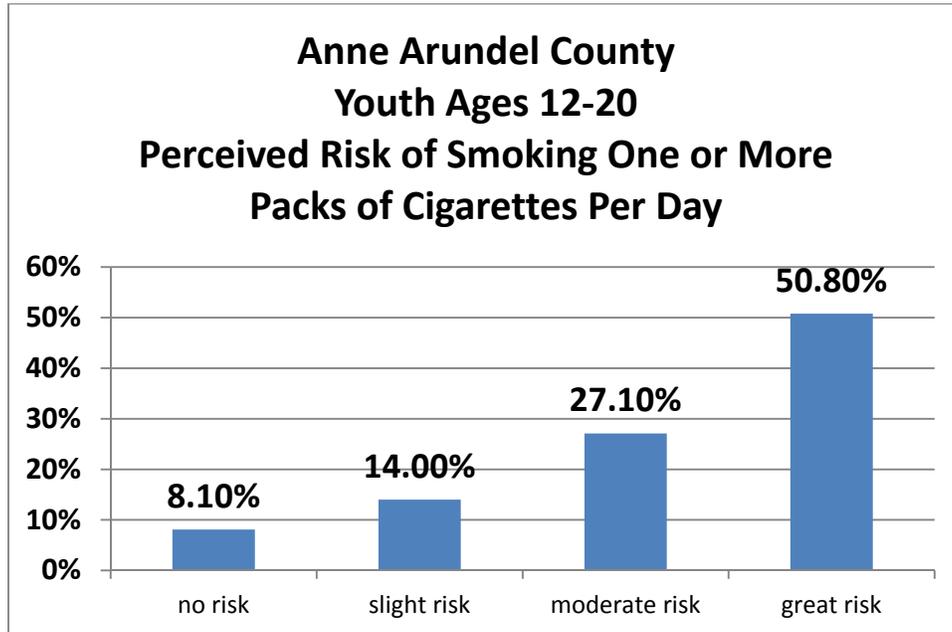
As a result of these multiple efforts, youth tobacco use has been trending downward. A survey entitled “Monitoring Changing Tobacco Use Behaviors 2000-2010” completed by the Maryland Department of Health and Mental Hygiene indicated substantial progress has been made in reducing the use of tobacco in underage youth in Maryland. In 2000, 15.7 percent of youth reported tobacco use, decreasing to 9.6 percent in 2010 and reflecting a 38.9 percent decrease in cigarette use among all underage youth in Maryland.

**B. 30-Day Use: During the past 30 days did you smoke part or all of a cigarette?**



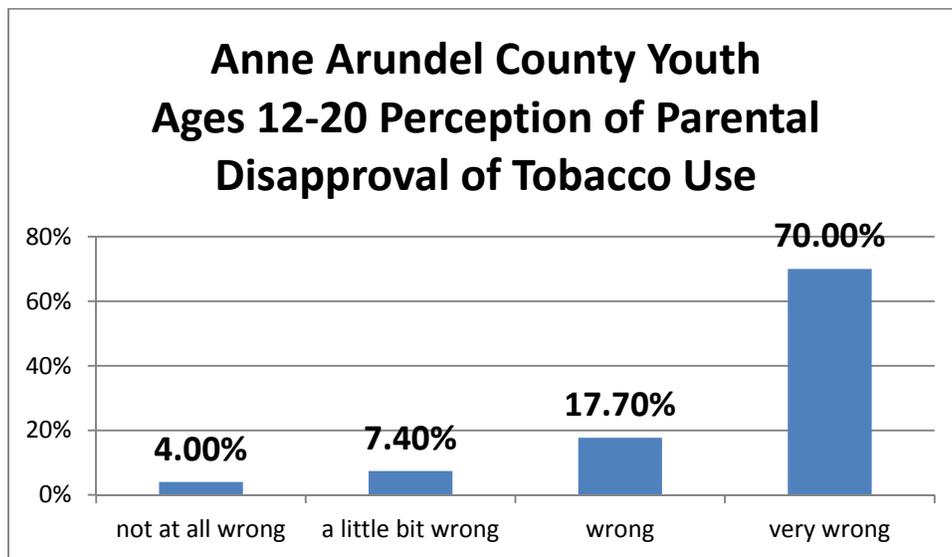
In AAC, youth surveyed reported 30-day use of cigarettes that varies by ZIP code area from 28% to no use. This is much lower than the alcohol ranges.

**B. Perception of Risk: How much do you think people risk harming themselves physically or in other ways when they smoke one or more packs of cigarettes per day?**



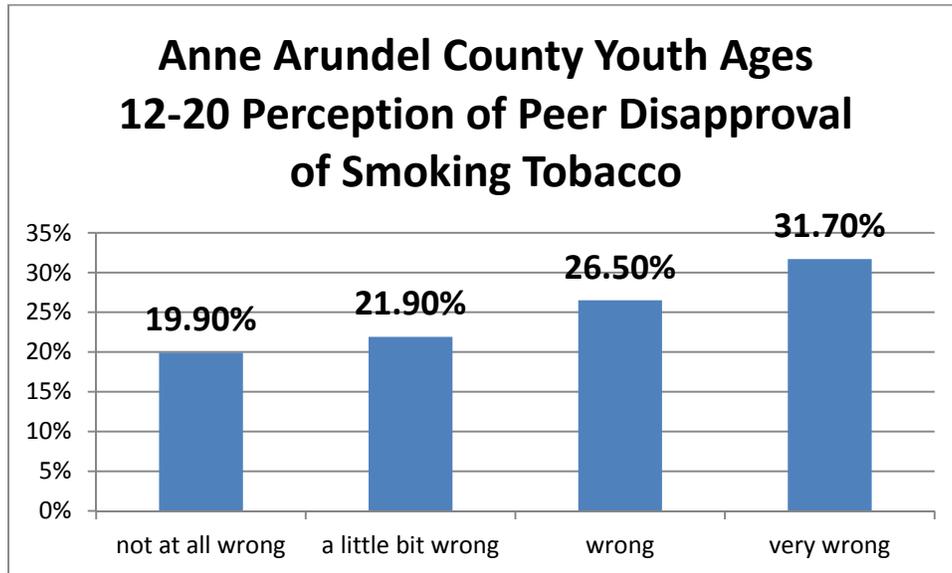
Research shows that if a youth perceives a lower risk, the likelihood of cigarette use increases. In AAC, 50.8% of the youth surveyed reported that they view smoking cigarettes to be a great risk.

**C. Perception of Parental Disapproval: How wrong do your parents feel it would be for you to smoke tobacco?**



Research shows that parental disapproval decreases youth's smoking. The majority of AAC youth surveyed report their parents would say cigarette use is very wrong (70%).

**D. Perception of Peer Disapproval: How wrong do your friends feel it would be for you to smoke tobacco?**



Research shows if youth perceive that their peers think substance use is wrong, then they are less likely to use substances. The majority of AAC youth report that their peers think smoking tobacco is wrong or very wrong (58.2%).

## Section Three

### Marijuana or Hashish Consumption and Perception of Risk and Harm

[E]xperts have seen the damage done by illegally obtained marijuana. Dr. Rhonda Allen said "...The substance does have a potential for addiction and is also often cited as a gateway drug. The literature documents it can lead to a motivational syndrome, with chronic apathy, chronic dullness, and a decrease in motivation, judgment or concentration. It can affect your heart rate, blood pressure, pulmonary function, drop in testosterone ... it's not a benign substance...It can be a hallucinogen, it can impair your judgment, your ability to drive. It does have potential for abuse." (Tina Reed, *Maryland Medical Marijuana: Doctors In Uncomfortable Position*, The Capital, March 23, 2013.)

#### A. Background Research About Marijuana and Hashish

Marijuana use peaked in the U.S. during the late '70s and '80s and then reached record lows in the early '90s. It has been increasing again in recent years. In 1982, nearly 75 percent of all arrests for drug abuse violations in the U. S. were for the sale, manufacturing or possession of marijuana. By 1990, marijuana arrests dropped to 33 percent. In 2010, 52 percent of all drug arrests were for marijuana, the highest rate since 1985.<sup>xxi</sup>

Early marijuana use is related to later substance use disorders. Adults who first start using marijuana at or before the age of 14 are six times more likely to have abused or become dependent on drugs than those who first used marijuana when they were 18 years of age or older.<sup>xxii</sup> More than two-thirds of U.S. residents who first started using drugs in 2012 began with marijuana.<sup>xxiii</sup>

According to the National Institute for Drug Abuse's Annual Monitoring the Future (MTF) survey, marijuana use continues to increase as perceived risk of harm from use decreases. In 2012, 22.9 percent of 12<sup>th</sup> graders reported using marijuana in the past month, a 25 percent rise since the most recent low of 18.3 percent in 2006.<sup>xxiv</sup> In fact, research shows that the proportion of teens using marijuana daily is at their highest levels seen since the 1970s.<sup>xxv</sup>

The active ingredient in marijuana is tetrahydrocannabinol (THC). Marijuana has become more potent over the years, with the levels of THC found in marijuana four times higher than it was in the 1970s. It is important to note that medical marijuana researchers highlight use for medical purposes in dire cases, such as end stage cancer, and still caution users that marijuana use in youth has well documented adverse effects.

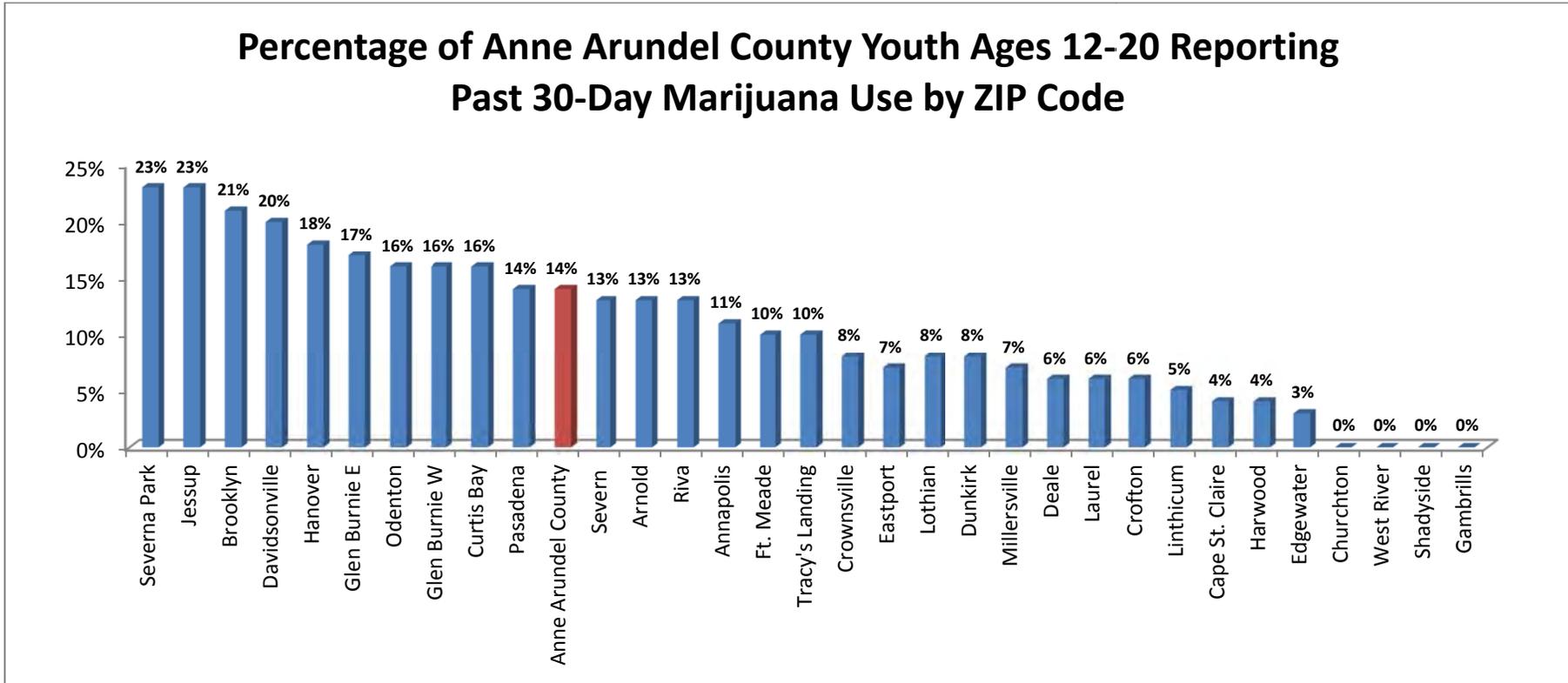
Marijuana contributes to pulmonary damage and significantly impairs judgment. Marijuana smoke contains 50-70 percent more carcinogenic hydrocarbons than does tobacco smoke.<sup>xxvi</sup> Marijuana use affects the brain, especially the developing brain, in the areas that are responsible for memory, learning, attention, reaction time and motor coordination.

Studies show that marijuana impairs motor coordination. The resulting delayed reaction time has caused researchers to conclude that marijuana use doubles the risk of car crashes.<sup>xxvii</sup> Driving while impaired or under the influence of any substance is a dire public health and public safety concern.

Marijuana is associated with a negative impact on academic outcomes. Marijuana has been linked to low motivation, poor memory, low grade point average and high dropout rates.<sup>xxviii</sup> Recent studies suggest that brain image scans of people who use marijuana show a decrease in a number of receptors associated with pleasure, appetite and pain tolerance.

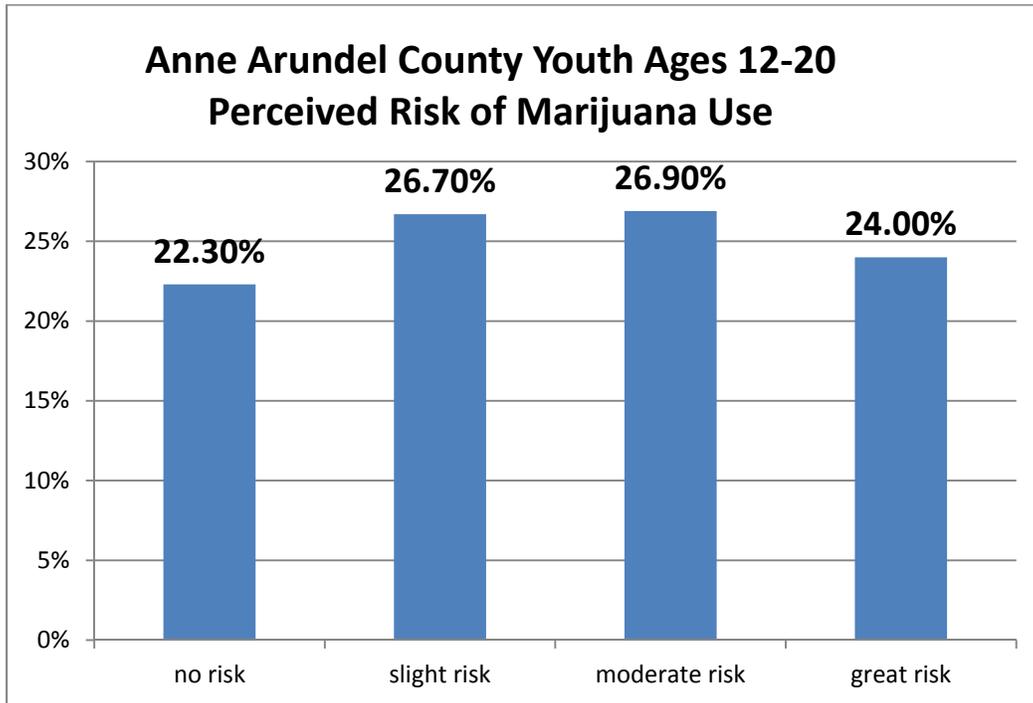
The impact of legalization of medical marijuana or small amounts of marijuana contributes to the youth perception that marijuana use is acceptable and even healthy. Teens' perception of marijuana's harmfulness has gradually decreased over the years. Youth believe the notion that if it's legal or if it has a medical use, it must be safe. Again, if perception of risk or harm decreases, the likelihood of using the substance increases.

**B. 30-Day Use: During the past 30 days have you used marijuana or hashish?**



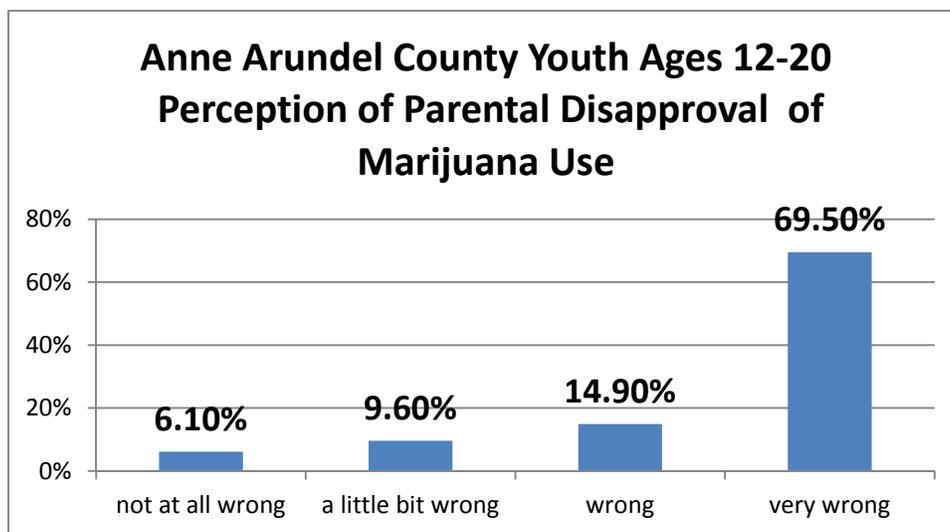
In AAC, surveyed youth reporting past 30-day use of marijuana varies in ZIP code area between 23% and 0%. The AAC average is 14% for marijuana versus 12% for cigarette smoking.

**C. Perception of Risk: How much do you think people risk harming themselves physically or in other ways when they smoke marijuana?**



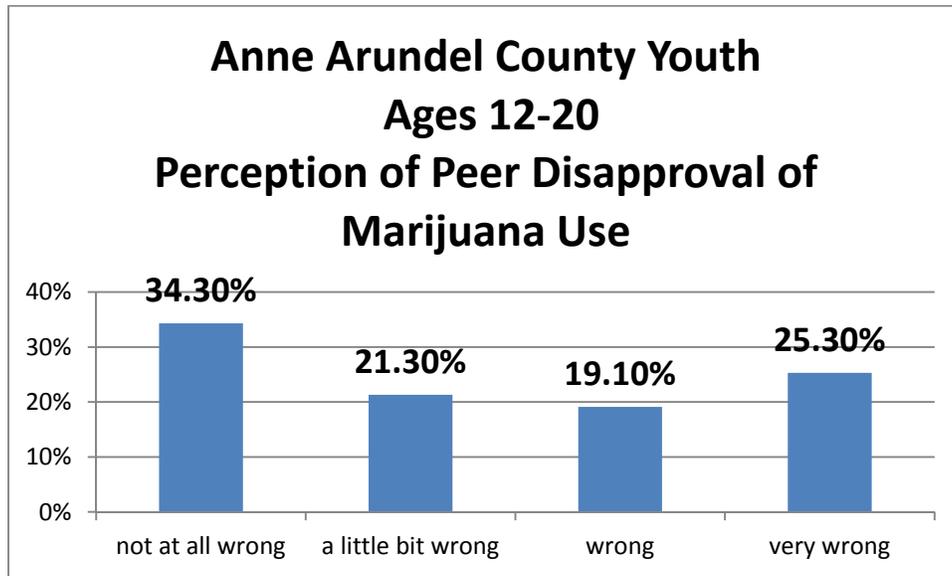
Research shows that low perceived risk increases youth’s marijuana use. In AAC, about half (50.9%) of youth surveyed report marijuana as a moderate risk or great risk.

**D. Perception of Parental Disapproval: How wrong do your parents feel it would be for you to smoke marijuana?**



Research shows as parental disapproval decreases, youth will use marijuana. The majority (almost 70%) of youth report parents would say marijuana use is very wrong.

**E. Perception of Peer Disapproval: How wrong do your friends feel it would be for you to smoke marijuana?**



Research shows if youth perceive their peers think it is wrong, youth are less likely to use substances. Over one-third (34.3%) of AAC youth say their peers see using marijuana is not at all wrong. About half of youth surveyed report marijuana use is wrong or very wrong (44.4%).

## Section Four

### Prescription Drugs Consumption and Perception of Risk and Harm

Anne Arundel County police collected 185 pounds of unwanted medication on Saturday during the national prescription drug take back initiative sponsored by the Drug Enforcement Administration. Residents dropped off the drugs at four police districts across the county, where police showcased newly-installed permanent drop boxes for prescription medication, available 24 hours a day and seven days a week. The effort saved hundreds of bottles of medications from being flushed down the toilet, contaminating local waterways and septic systems, or getting into the hands of drug abusers and children. (Brian Hooks, Editor, *Police Collect 185 Pounds of Medication in Drug Take Back*, Anne Arundel Patch, May 7, 2013.)

#### A. Background Research About Prescription Drugs

More than 22 percent of U.S. residents who first started using drugs in 2012 reported that prescription drugs used non-medically were the first drug they tried.<sup>xxix</sup> An estimated 48 million people or about 20 percent of the U.S. population have used prescription drugs for non-medical reasons in their lifetimes.

Two-thirds of people who used prescription drugs for nonmedical reasons report they got pills for the first time for free, or stole them from a relative, friend or online.<sup>xxx</sup> The latest Prescription Take Back Day yielded 50 percent more pills than last year. Disposing old medications provides a safe way to keep prescription drugs from disappearing from the family medicine cabinet into the hands of people to whom the drugs were not prescribed.

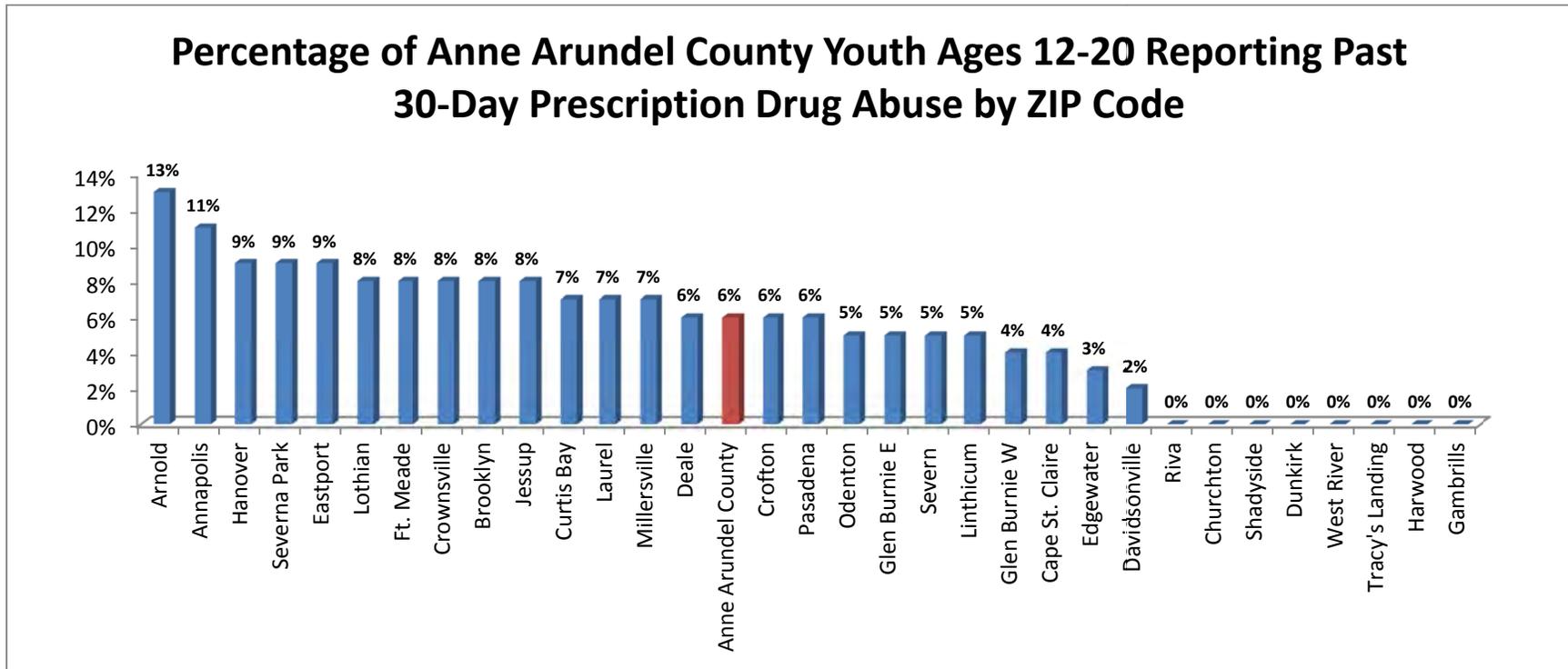
In Maryland, from 2004 to 2008, the estimated number of emergency department visits linked to the non-medical use of prescription pain-relievers increased by 111 percent. The proportion of Americans treated for prescription painkiller abuse increased 400 percent from 1998 to 2008. Prescription drugs are the second most commonly abused category of illicit drugs, behind marijuana.<sup>xxxi</sup>

Drug overdose deaths now account for 24 percent of all unintentional deaths. Unintentional drug overdoses include those resulting from illegal, prescription and over-the-counter drug misuse and abuse.<sup>xxxii</sup> In AAC, prescription opioid drug overdoses are the third highest state-wide. There were 17 prescription opioid overdose deaths in 2011 and 11 prescription opioid deaths in 2012. As required of all counties in Maryland, an Opioid Overdose Prevention Plan was submitted to the Alcohol and Drug Abuse Administration in the spring of 2013.

A national study conducted in 2013 by the Partnership Attitude Tracking Study (PATS) and MetLife Foundation found that of teens who said they abuse prescription medications, 20 percent said they did so before the age of 14. One-third of teens say it is okay to use prescription drugs that were not prescribed to them to deal with an injury, illness or physical pain. Twenty-seven percent incorrectly believe that misusing and abusing prescription drugs is safer than using street drugs.<sup>xxxiii</sup>

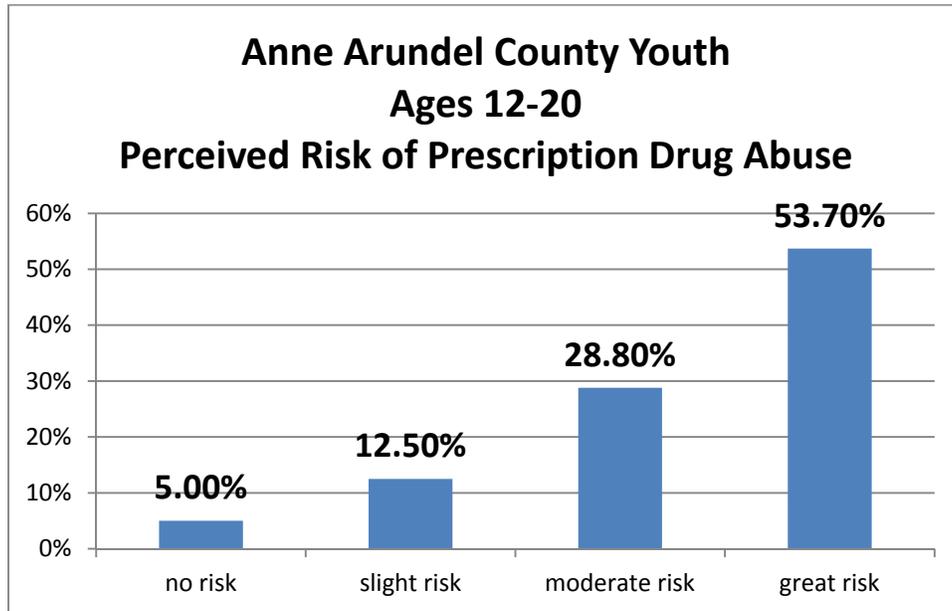
Physicians warn that when misused and abused, prescription drugs can be every bit as dangerous and harmful as illicit street drugs.<sup>xxxiv</sup> While most people recognize the dangers of leaving a loaded gun lying around the house, few people realize that far more people die as a result of unsecured prescription drugs.<sup>xxxv</sup>

**B. 30-Day Use: During the past 30 days have you used prescription drugs not prescribed to you?**



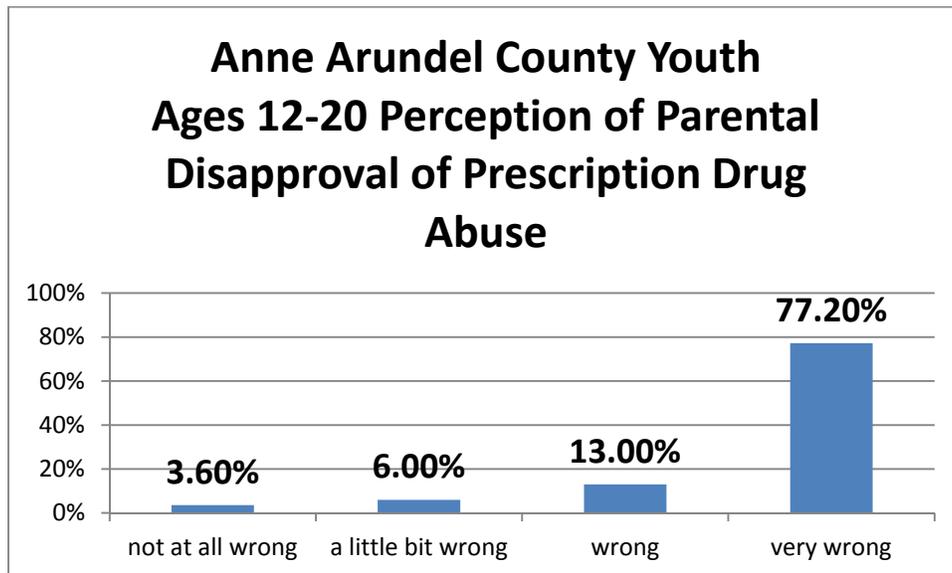
In AAC, youth surveyed reported 30-day use of prescription drugs that varies by ZIP code area between 13% and 0%.

**C. Perception of Risk: How much do you think people risk harming themselves physically or in other ways if they use prescription drugs that are not prescribed to them?**



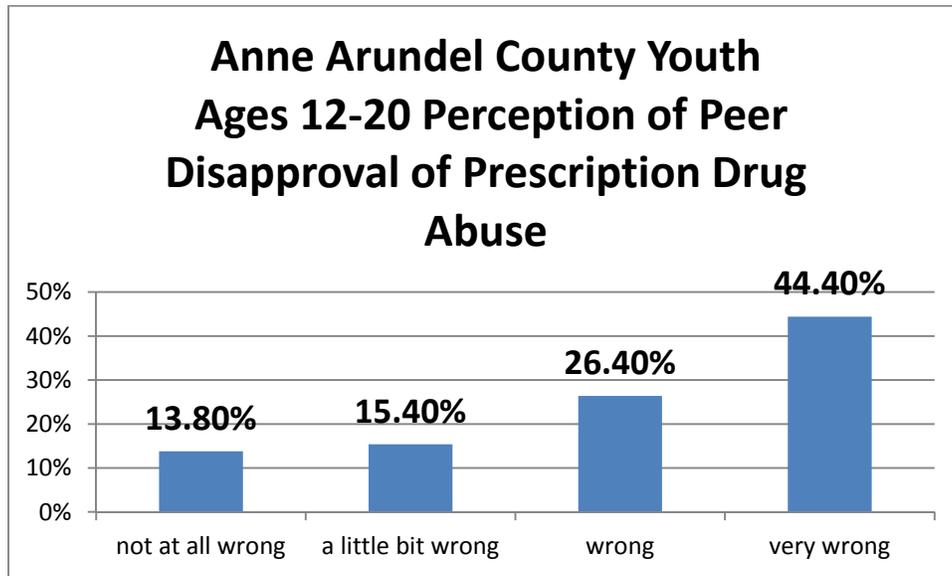
Research shows that low perceived risk increases youth’s prescription drug use. In AAC, over half of youth surveyed (53.7%) report that prescription drug use is a great risk.

**D. Perception of Parental Disapproval: How wrong do your parents feel it would be for you to use prescription drugs not prescribed to you?**



Research shows parental disapproval decreases youth’s prescription drug abuse. The majority of youth surveyed say parents would view prescription drug abuse as very wrong (77.2%).

**E. Perception of Peer Disapproval: How wrong do your friends feel it would be for you to use prescription drugs not prescribed to you?**



Research shows that if youth perceive their peers disapproving of prescription drug use, then they will be less likely to use substances. In AAC, the majority of youth surveyed said that their peers would say prescription drug abuse is very wrong (44.4%).

## Conclusions

### Summary of Anne Arundel County 30-Day Use Percentages and Ranges by Substance

	AA Countywide Average	AA County Ranges by ZIP Code
<b>Alcohol</b>	27 %	15% - 48 %
<b>Tobacco</b>	12 %	0 % - 28 %
<b>Marijuana or Hashish</b>	14 %	0 % - 23 %
<b>Prescription Drugs</b>	6 %	0 % - 13 %

Over one quarter of youth reported 30-day alcohol use. Data by ZIP code indicates underage drinking occurs in all AAC ZIP codes. The county average for marijuana use is slightly higher than tobacco use, although tobacco has a slightly greater range of usage by ZIP code. Prescription drugs were the least reported substance used in the last 30 days. Since this survey is baseline data, trends will be established when surveys are administered again in two years.

As indicated by the 2013 AAC Consumption Survey, youth are using substances by the time they reach high school. Reaching youth in middle school with clear anti-drug messages is a key to prevention.

ZIP code areas indicating high prevalence of use or low perception of harm percentages need further study.

Areas that have low sample sizes need additional surveys to assess the extent of substance use.

The majority of youth who use alcohol report that they get their alcohol from someone who gave it to them or that they gave someone money to buy it for them. Adults need to remain mindful of their own alcohol supply, and of the plethora of risks that accrue to both adults and youth when adults furnish alcohol to underage youth.

Additional locally-led substance abuse prevention coalitions need to be formed in areas of AAC. Coalitions provide citizens with an avenue to collect local data, assess the data, set mutual goals, and develop a plan to address and prevent substance abuse in their local area. Collaboration among educators, law enforcement agencies, health officials, community members, businesses, government agencies, faith-based groups, parents and providers is the key to ensuring that County residents are well-informed, healthy, have access to substance abuse prevention services.

## Endnotes

- <sup>i</sup> Join Together Staff, *Study Finds High Rate of Underage Drinking*, Alcohol, Healthcare, Young adults & Youth, November 27, 2012, <http://www.drugfree.org/join-together/alcohol/study-finds-high-rate-of-underage-drinking>), (last visited Aug 22, 2013).
- <sup>ii</sup> *Id.*
- <sup>iii</sup> US Department of Health and Human Services. "The Surgeon Generals Call to Action to Prevent and Reduce Underage Drinking." 2007, [www.surgeongeneral.gov/topics/underagedrinking](http://www.surgeongeneral.gov/topics/underagedrinking), (last visited Aug. 22, 2013).
- <sup>iv</sup> Center for Disease Control and Prevention. Fact Sheets - Alcohol Related Disease Impact, 2013, <http://www.cdc.gov/alcohol/fact-sheets.htm>, (last visited Aug. 22, 2013).
- <sup>v</sup> Marissa B. Esser, MPH, CHES, "Binge Drinking in Maryland by Income, Adolescents, Adults and Alcohol," Severn School Presentation, October 27, 2011.
- <sup>vi</sup> Join Together Staff, *Underage Drinking Hospitalizations Cost \$755 Million in the U.S. Each Year*, Alcohol, Healthcare, Young Adults & Youth, February 16, 2012, <http://www.drugfree.org/join-together/alcohol/underage-drinking-hospitalizations-cost-755-million-in-the-u-s-each-year>, (last visited Aug. 22, 2013).
- <sup>vii</sup> Join Together Staff, *Alcohol is Third leading Cause of Global Disease and Injury*, Study Finds, Alcohol, Healthcare, Young Adults & Youth, March 5, 2013 <http://www.drugfree.org/join-together/alcohol/alcohol-is-third-leading-cause-of-global-disease-and-injury-study-finds>; and, *Alcohol Use Results in an Estimated 20,000 Cancer Deaths in U. S.*, February 15, 2013, <http://www.drugfree.org/join-together/alcohol/alcohol-use-results-in-an-estimated-20000-cancer-deaths-in-u-s>, (last visited Aug. 22, 2013).
- <sup>viii</sup> AAC Report Card of Community Health Indicators, May 2013, <http://www.aahealth.org/pdf/aahealth-report-card-2013.pdf>
- <sup>ix</sup> AAC Hospital Data Set, 2010.
- <sup>x</sup> National Institute on Alcohol Abuse and Alcoholism. Beyond Hangovers: Understanding Alcohol's Impact on Your Health, <http://www.niaaa.nih.gov/alcohol-health> (last visited Aug. 22, 2013).
- <sup>x</sup> *Id.*
- <sup>xi</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, *Results from the 2009 National Survey on Drug Use and Health*, University of Maryland, 19:10, October 18, 2010.
- <sup>xii</sup> *Alcoholism – A Chronic and Progressive Disease*. University of Pittsburg at Johnstown, 2008, <http://www.upj.pitt.edu/1490/> (last visited Aug. 22, 2013).
- <sup>xiii</sup> Join Together Staff, *Study Links Mothers Who Let Kids Sip Alcohol and Children's Reported Drinking*, Alcohol, Parenting, Prevention and Youth, September 19, 2012, <http://www.drugfree.org/join-together/alcohol/study-links-mothers-who-let-kids-sip-alcohol-and-children%e2%80%99s-reported-drinking>, (last visited Aug. 22, 2013).
- <sup>xiv</sup> Join Together Staff, *Parents More Important than School, in Preventing Use of Alcohol, Marijuana Use, Alcohol Drugs Parenting Prevention Research and Youth*, December 6, 2012, <http://www.bing.com/search?q=Join+Together+Staff%2C+Parents+More+Important+than+School%2C+in+Preventing+Use+of+Alcohol%2C&src=IE-SearchBox&Form=IE8SRC>, (last visited Aug. 22, 2013).
- <sup>xv</sup> *Ibid*, 20:38, October 10, 2011.
- <sup>xvi</sup> Talk, they hear you. SAMSHA [http://www.samhsa.gov/underagedrinking/subpageb\\_press.aspx](http://www.samhsa.gov/underagedrinking/subpageb_press.aspx) (last visited Aug. 22, 2013).
- <sup>xvii</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 19:17, May 10, 2010.
- <sup>xviii</sup> Join Together Staff, *Study links Smoking in Teens and Young Adults with Risk of Death Before 55*, Tobacco Young Adults and Youth, August 3, 2011, <http://www.drugfree.org/join-together/research/study-links-smoking-in-teens-and-young-adults-with-risk-of-death-before-55> (last visited Aug. 22, 2013).
- <sup>xix</sup> Join Together Staff, *Study Links Smoking with Brain Changes and Memory Decline*, Elderly, Research and Tobacco, August 3, 2011, <http://www.drugfree.org/join-together/elderly/study-links-smoking-with-brain-changes-and-memory-decline> (last visited Aug. 22, 2013).
- <sup>xx</sup> AADDOH, Learn to Live, [http://learntolivehealthy.org/ltl\\_youthtobacco.asp](http://learntolivehealthy.org/ltl_youthtobacco.asp), (last visited Aug. 29, 2013).
- <sup>xxi</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 20:43, November 14, 2011.
- <sup>xxii</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 19:41, October 25, 2010.
- <sup>xxiii</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 21:42, October 22, 2012.
- <sup>xxiv</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 22:2, January 14, 2013.

---

<sup>xxv</sup> Rachel Hassinger, *Monitoring the Future Finds More Teens Using Marijuana While Alcohol Use Continues Decline*. Join Together. December 14, 2010, <http://www.drugfree.org/join-together/other/monitoring-the-future-brings> (last visited Aug. 22, 2013).

<sup>xxvi</sup> CADCA, *Marijuana and Your Health: Just the Facts Part I*, 2012, <http://www.cadca.org/> (last visited Aug. 22, 2013).

<sup>xxvii</sup> Id.

<sup>xxviii</sup> Amelia M. Arria, PhD and Robert L DuPont, M.D., *Commentary: Recognizing the Contribution of Adolescent Substance Use to Poor School Performance*. *Alcohol Drugs and Prevention*, April 19, 2013.

<sup>xxix</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 21:42m October 22, 2012.

<sup>xxx</sup> Join Together Staff, *Survey: Prescription Painkiller Abuse Often Starts With Free Pills From Friends, Family*. *Prescription Drugs and Youth*, April 25, 2012, <http://www.drugfree.org/join-together/prescription-drugs/survey-prescription-painkiller-abuse-often-starts-with-free-pills-from-friends-family>, (last visited Aug. 22, 2013).

<sup>xxxi</sup> Alcohol and Drug Abuse Administration (ADAA), *Prescription Drug Abuse in Maryland*, Presentation, 2012.

<sup>xxxii</sup> CESAR FAX, Substance Abuse and Mental Health Services Administration, 20:19, May 23, 2011.

<sup>xxxiii</sup> Celia Vimont, *One-Fourth of Teens Have Misused or Abuse Prescription Drugs at Least Once: Study*, *Prescription Drugs, Research and Youth*, April 23, 2013.

<sup>xxxiv</sup> Join Together Staff, *Teens, Young Adults Driving Prescription Drug Abuse Increase, Study Finds*, *Prescription Drugs, Young Adults & Youth*, October 18, 2012 <http://www.drugfree.org/join-together/prescription-drugs/teens-young-adults-driving-prescription-drug-abuse-increase-study-finds> (last visited Aug. 22, 2013).

<sup>xxxv</sup> Id.