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# The State of Prescription Drug Use in Georgia: A Needs Assessment

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To: The Council on Alcohol and Drugs

For: Georgia Department of Behavioral Health and  
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## EXECUTIVE SUMMARY

The Office of National Drug Control Policy (ONDCP) has deemed prescription drug abuse an epidemic in the U.S. Nonmedical use of prescription drugs has grown substantially since the 1990's and is responsible for an increasing number of emergency department visits and overdose deaths. Mortality due to poisoning, the majority of which is caused by prescription and illicit drug use, is now the leading cause of injury death in the U.S., surpassing automobile fatalities.<sup>11</sup>

In recognition of this significant public health threat, the Georgia Department of Behavioral Health and Developmental Disabilities, Division of Addictive Diseases, Office of Prevention Services and Programs funded The Council on Alcohol and Drugs to implement the Georgia Prescription Drug Abuse Prevention Initiative (GPDAPI). An initial component of this Initiative was a Needs Assessment in order to gain a better understanding of the scope of the problem in the U.S. and in Georgia, establish a baseline understanding of the extent to which Georgians are impacted by prescription drug abuse and identify efforts to reduce and prevent such abuse.

The Needs Assessment was conducted using secondary data sources to obtain information in the domains of surveillance data, prescription drug policies, programs and interventions. Areas of emphasis for the Needs Assessment were driven by the specific program efforts to be implemented by The Council on Alcohol and Drugs throughout the program years of the Initiative. Program area efforts include education, prescription drug monitoring, proper medication disposal and assisting law enforcement. These specific efforts were initially

outlined by the Office of National Drug Control Policy in their Prescription Drug Abuse Prevention Plan.

The Needs Assessment was predicated on the assumption that a number of Georgians have prescription drug abuse related needs that are not being met or addressed adequately. The Needs Assessment presents the findings of a literature review and informal informational inquiries regarding the prevalence and impacts of prescription drug abuse nationally and in Georgia, as well as related policies, programs and interventions impacting prescription drug use.

## **METHODOLOGY**

The Needs Assessment was specifically designed to 1) identify reliable sources of prescription drug surveillance data to assess the prevalence of prescription drug abuse, 2) identify demographic variables associated with prescription drug abuse, as well as 3) identify the prevalence of prescription drug dependence and overdose deaths due to prescription drug abuse 4) identify policies, programs and interventions currently utilized to stem prescription drug abuse and 5) identify gaps in existing data and programs in order to bolster efforts in Georgia to address prescription drug abuse.

The Needs Assessment was comprised primarily of a review of secondary data through an extensive web search and literature review. Additional inquiries were made to appropriate sources to obtain information inaccessible through web-based searches. Examples of these inquiries included phone calls to Drug Free Community Coalitions and other coalitions in Georgia to identify programs and/or activities currently being implemented to address prescription drug abuse in their communities, as well as inquiries to local medical schools to

identify curricula that relate to prescription drug abuse identification, prevention and appropriate prescribing practices. Additionally, the Diversion Program Manager of the Atlanta Field Division of the Drug Enforcement Agency (DEA) was contacted in order to garner information regarding Georgia counties' participation in prescription drug take-back events.

## **HIGHLIGHTS OF THE FINDINGS**

Reliable data sources for understanding the scope and nature of prescription drug abuse nationally and in Georgia were identified as the National Survey on Drug Use and Health, Monitoring the Future, TEDS (Treatment Episode Data Set), the Georgia Student Health Survey ii, and publications based on the aforementioned sources.

### **U.S. Prevalence:**

- Every year since 2002, 2.5 to 2.8 million Americans have abused prescription drugs for the first time. Since 1990, the number of individuals who take prescription drugs illegally is believed to have risen by over 500 percent during this time.<sup>3</sup>
- In 2010, the majority of those aged 12 or older used marijuana as their first illicit drug in 2010; the second most frequently used drug of initiation was nonmedical pain relievers.<sup>3</sup>
- Among persons aged 12 or older in 2009-2010 who used pain relievers non-medically in the past year, 55.0 percent reported obtaining the pain relievers they most recently used through a friend or relative for free, 11.4 percent reported purchasing them from a friend or relative, and 4.8 percent reporting taking them from a friend or relative without asking.<sup>3</sup>

- Overall, the number of new initiates (past 12 months) of psychotherapeutic drugs in 2010 equaled 2.4 million persons age 12 or older, approximately 6,600 new users per day. The category “psychotherapeutics” includes the four categories of prescription-type drugs (pain relievers, tranquilizers, stimulants, and sedatives) and covers numerous medications that currently are or have been available by prescription. This category of drug also includes drugs within these groupings that originally were prescription medications but currently may be manufactured and distributed illegally, such as methamphetamine, which is included under stimulants.<sup>3</sup>
- Among 12th graders nationally, prescription and over-the-counter (OTC) medications are the most commonly abused drugs after nicotine, alcohol and marijuana.<sup>4</sup>
- Overall, the nonmedical use of psychotherapeutic drugs has declined in the past decade among 12 to 17 year olds from 4.0 percent in 2002 and 2003 to 3.0 percent in 2010.
- In addition to having the highest overall rates of illicit drug use, 18 to 25 year olds also had the highest rates of nonmedical use of psychotherapeutic drugs.<sup>3</sup>
- Among those aged 12 and older, males were more likely than females to be current users of several different illicit drugs, including nonmedical use of psychotherapeutic drugs.<sup>3</sup>
- Females aged 12 to 17 were more likely than males aged 12 to 17 to be current nonmedical users of psychotherapeutic drugs and current nonmedical users of pain relievers.<sup>3</sup>

- Among 12th graders, Whites tend to have the highest rates of use of a number of drugs, including OxyContin, Vicodin, amphetamines, Ritalin, Adderall sedatives and tranquilizers.<sup>4</sup>
- In 8th grade, Hispanics had the highest rate of illicit drug use overall and the highest rates for most drugs (though not for amphetamines, Ritalin or Adderall specifically).<sup>4</sup>

### **Georgia Prevalence:**

- In 2008-2009, an estimated 360,000 (4.62 percent) of Georgians aged 12 and older reported using pain relievers non-medically. Of the 360,000 users, 51,000 (14 percent) were 12 to 17 years old, 120,000 were between 18 and 25 (33 percent), and 189,000 (53 percent) were 26 years of age and older.<sup>5</sup>
- Between 2002 and 2008, approximately 374,000 Georgians abused pain killers each year, 199,000 used “special drugs” and approximately 173,000 abused tranquilizers. “Special drugs” includes both prescription and nonprescription drugs including: GBH, Adderall, Ambien, non-prescription cold and cough medicines, ketamine, DMT, AMT (Foxy), and Salvia divinorum.<sup>7</sup>
- For youth ages 12 to 17, nearly one out of every five (18.8 percent) used at least one illicit drug and slightly more (19.1 percent) used illicit drugs including “special drugs”.<sup>7</sup>
- Nearly seven percent (6.6 percent) of those 12 to 17 used pain relievers nonmedically. As is true nationally, 18 to 25 year olds had the highest rates of illicit drug use in Georgia (31.2 percent) and the highest rate of use of prescription pain relievers (11.4 percent).<sup>7</sup>
- Overall, illicit drug use in Georgia was slightly higher among blacks (17 percent), than whites (13.9 percent) or Hispanics (12.4 percent). Hispanics were significantly more

likely to have abused pain relievers than blacks (7.9 percent vs. 3.5 percent respectively).<sup>7</sup>

- According to Georgia Student Health Survey ii (GSHS) approximately 1,020 6th graders, 1,859 8th graders, 1,832 9th graders, 2,330 10th graders, 2,164 11th graders and 2,402 12th graders reported having used prescription drugs not prescribed to them at least once during the past 30 days.<sup>8</sup>
- Students in higher grades tended to report a higher prevalence of prescription drug use, as well as higher frequencies of use.<sup>8</sup>
- Ease of access to prescription drugs increased according to students' grade level and nearly 40 percent (36.9%) of 12 graders reported that they strongly agreed it was easy to obtain prescription drugs not prescribed to them. Similar percentages were found among 10th graders (32 percent) and 11th graders (34.7 percent), while over a quarter of 9th graders (26.9 percent) strongly agreed it was easy to obtain prescription medicines not prescribed to them.<sup>8</sup>
- The majority of students across all grades reported that they strongly agreed that taking prescription drugs not prescribed to them was harmful. However, a significant number of students across all grades reported somewhat or strongly disagreeing that that taking prescription drugs not prescribed to them was harmful.<sup>8</sup>

### **U.S. Dependence:**

- In 2010, the number of persons aged 12 or older who had dependence or abuse of pain relievers in the past year was 1,921,000, second only to marijuana (4,476,000).<sup>3</sup>

- Treatment admissions for opiates other than heroin have grown substantially since 1999. The treatment admission rate among persons aged 12 and older was 430 percent higher in 2009 (53 per 100,000) than in 1999 (10 per 100,000).<sup>10</sup>

### **Georgia Dependence:**

- In 2008-2009, 1.64 percent of Georgians aged 12 and older suffered from dependence on illicit drugs. An estimated 2.37 percent of Georgians aged 12 and older needed but did not receive treatment for illicit drug use.<sup>5</sup>
- Georgia admissions for the treatment of opiates other than heroin among those aged 12 and older increased from 295 per 100,000 in 1999 to 599 per 100,000 in 2005.<sup>10</sup>
- Georgia is one of only a few states that do not regularly report admissions data to the Treatment Episode Data Set (TEDS). Georgia has not reported data to TEDS since 2005.<sup>10</sup>

### **U.S. Overdoses:**

- An estimated 100 people die from drug overdoses in the U.S. daily, and over 36,000 people died from drug overdoses in 2008, the majority of which were caused by prescription drugs.<sup>1,13</sup>
- Emergency department visits resulting from prescription opioid use increased by 111% between 2004 and 2008. In 2009, the misuse of opioid pain relievers was responsible for 475,000 emergency visits.<sup>12</sup>
- The rates of drug overdoses have more than tripled since 1990. Prescription pain killers were involved in 14,800 overdose deaths in 2008, and caused three out of every four prescription drug overdoses.<sup>12</sup>

### **Georgia Overdoses:**

- Prescription drug overdose deaths in Georgia continue to rise, accounting for 76% of the accidental drug deaths in the state.<sup>13</sup>
- There was a 10% increase in the number of prescription overdose deaths in 2010 compared to 2009 in the 152 counties analyzed.<sup>13</sup>

### **Prescription Drug Education Efforts:**

- Multiple federal and state agencies are involved in educating the public about prescription drug use and abuse. Public education efforts seek to educate patients and the general public about appropriate use, secure storage, and disposal of prescription drugs in addition to the risks associated with misuse and abuse.<sup>19</sup>
- The majority of Drug Free Community Coalitions and other coalitions in Georgia currently do not have any initiatives specifically targeting prescription drug abuse within their communities.
- The Medical Association of Georgia Foundation (MAGF) is currently spearheading a project called the “Think About It” Campaign to educate physicians, other healthcare professionals and the public on prescription drug abuse issues. The Campaign is also advocating for a comprehensive drug policy for Georgia and promoting proper medication storage and disposal.<sup>26</sup>

### **Prescription Drug Disposal Efforts:**

- The FDA provides guidelines for the proper disposal of prescription medications, which includes, in some instances, the disposal of prescription medications through flushing them down the sink or toilet. However, the flushing of medications has been staunchly

criticized by the Georgia Association of Water Professionals as medications contaminate the water supply and may pose a danger to the public's health.<sup>37, 38</sup>

- The Secure and Responsible Drug Disposal Act of 2010 allows communities to accept and dispose of prescription medications without fear of prosecution.<sup>35</sup> The Drug Enforcement Agency (DEA), in conjunction with local communities, initiated National Drug Take-Back Days providing community members with the opportunity to drop off their unused medications at specific locations.
- Ninety counties in Georgia were identified as having participated in National Take-Back day events, though only five counties were identified as having an ongoing prescription drug disposal program in place.

#### **Prescription Drug Monitoring Program Efforts:**

- The Office of National Drug Control Policy (ONDCP) has concluded that Prescription Drug Monitoring Programs (PDMPs) appear to be a promising approach to reducing prescription drug abuse and diversion, but emphasize that it is necessary to continue working to maximize their effectiveness by providing real-time access by clinicians and increasing inter-state operability and communication.<sup>14</sup>
- In 2011, Senate Bill 36, the Patient Safety Act, was signed into law in Georgia, authorizing legislation for the establishment of a PDMP and Electronic Database Review Advisory Committee. The legislation calls for the program to monitor the prescribing and dispensing of Schedule II, III, IV, and V controlled substances, though the current law does not contain a provision for sharing data across state lines as is recommended by the ONDCP.<sup>57</sup>

### **National Drug Enforcement Efforts:**

- Efforts to reduce the amount of prescription opioids being dispensed illegally include the FDA's Risk Evaluation and Mitigation Strategies (REMS), the establishment of statewide PDMPs, and the adoption of new legislation and enforcing existing laws. Additionally, many states have enacted various forms of legislation aimed at mitigating prescription drug abuse.<sup>31,54,63</sup>
- The 2011 ONDCP report, Epidemic: Responding to America's Prescription Drug Abuse Crisis, calls on law enforcement agencies to help decrease prescription drug diversion and abuse, and outlines specific actions the federal government can take to help law enforcement agencies effectively address pill mills and doctor shopping.<sup>14</sup>
- The Pill Mill Crackdown Act of 2011, which aims to amend the Controlled Substances Act in order to reduce the number of pill mills nationally, is scheduled to be voted on in the spring of 2012.<sup>64</sup>

### **Georgia Drug Enforcement Efforts:**

- In response to the dramatic growth of pill mills in 2011, Georgia enacted legislation in November of 2011 to establish a PDMP and the establishment of an Electronic Database Review Advisory Committee. Georgia's PDMP is not scheduled to be operational until January of 2013.<sup>57</sup>
- In the current absence of a statewide pill mill laws, some Georgia counties and cities have adopted local ordinances to fight new and current pill mill operations. In addition to Georgia's PDMP, a number of organizations dedicated to mitigating the epidemic of prescription drug abuse exist, including the High Intensity Drug Trafficking Areas

Program, the Georgia Drugs and Narcotics Agency, and the Georgia Chapter of National Association of Drug Diversion Investigators<sup>66-68</sup>

- A number of criminal laws exist under the Georgia Controlled Substances Act to mandate prescription drug abuse convictions and punishments in the State.<sup>69</sup>

## **RECOMMENDATIONS**

Based on the Needs Assessment, the following recommendations are presented.

1. The State of Georgia would benefit from identifying a lead agency which could serve as a primary resource for understanding the problem of prescription drug misuse (such as using prescription drugs prescribed to others or taking prescription drugs not in accordance with their intended use) and abuse across the state. Additionally, the creation of a centralized database for accessing all prescription drug related activities would allow for sharing of effective strategies among Georgia counties, widespread public education messages, and drop off disposal information. Having a central repository for information would be time saving and could help partners synergistically address the drug use and abuse problem so that resources such as time, energy, and attention could be maximized.
2. The State of Georgia would benefit from investing in a well-orchestrated, comprehensive needs assessment that utilizes primary data collection. It would be beneficial to conduct a randomized survey of the public as well as stakeholders that could shed light on unique elements of drug use and abuse that exist in Georgia. Since current surveillance systems capture different information about substance abuse, a regularly occurring assessment implemented across the state would be beneficial in tracking the progress of intervention efforts and identifying those areas that require targeting.

3. Unless Georgia agrees to augment its current PDMP by agreeing to share data across state lines, Federal funding of the PDMP will end, thereby putting an end to the program. Therefore such augmentation, in accord with HIPPA guidelines, is recommended. Supporting the passage of legislation that allows for the sharing of PDMP data across state lines would help to further identify unscrupulous prescribing practices and patient drug diversion.

4. Expanding partnerships across the state to include Georgia schools and Parent Teacher Associations to facilitate the education of both children and parents would aid in the efforts of preventing prescription drug abuse initiation and drug diversion. As evidenced by the literature and the GSHS, children in Georgia are still finding prescription drugs highly accessible. While much focus has been given to opioid pain relievers, drugs such as Ritalin and Adderall, often prescribed to children for Attention Deficit Hyperactivity Disorder (ADHD), are among some of the most popular prescription drugs taken nonmedically. Education specifically regarding prescription medications belonging to children may warrant further emphasis. Continued education efforts, availability of drug disposal sites, and the promotion of in home, permanent drug lock boxes will help reduce the availability of prescription medications to children.

5. Additional partnerships with those working with high-risk populations in Georgia for education and intervention would also be beneficial. Nationally and in Georgia 18-25 year olds have the highest rates of nonmedical use of prescription drugs. Further, those involved in the justice system also tend to have higher rates of prescription drug use. Efforts targeting and providing treatment to high-risk young adults in Georgia would aid in the prevention of further dependence and overdose deaths.

6. Assessing the availability of drug treatment centers in Georgia and ensuring treatment availability for those in need would help reduce the abuse of prescription drugs and aid in the prevention of prescription drug overdoses which are on the rise. Georgia has not reported treatment admissions data to the Treatment Episode Data Set (TEDS) since 2005. Resuming the reporting of this data would provide a valuable surveillance tool to continue to track prescription drug abuse dependence in the state.

7. Utilizing key practices set forth by the Government Accountability Office to implement and evaluate public education efforts, including establishing both process and outcome metrics to measure success would help to ensure the effectiveness of education efforts. Though prescription drug education is central to Georgia efforts, also including other commonly abused medications that are available over the counter, such as cough medicine, would be appropriate.

## **LIMITATIONS**

The Needs Assessment represents an initial attempt to explore and understand the scope of prescription drug use in the U.S. and in Georgia, and identify promising programs and practices for combating this problem. The Needs Assessment relied on secondary data sources and therefore was limited by the availability of such data.

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1. CDC Grand Rounds: Prescription drug overdoses — a U.S. epidemic. Available at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm>. Accessed March 23, 2012.

3. Substance Abuse and Mental Health Services Administration. *Results from the 2010 national survey on drug use and health: summary of national findings*. Rockville, MD: Substance Abuse and Mental Health Service Administration; 2011.

4. Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2011). *Monitoring the future national survey results on drug use, 1975-2010*. Volume I: Secondary school.

5. Substance Abuse and Mental Health Services Administration. *State Estimates of Substance Use and Mental Disorders from*

- the 2008-2009 National Surveys on Drug Use and Health, NSDUH Series H-40, HHS Publication No. (SMA) 11-4641.*  
Rockville, MD: Substance Abuse and Mental Health Services Administration; 2011. Available at:  
<http://store.samhsa.gov/shin/content/SMA11-4641/SMA11-4641.pdf>. Accessed March 15, 2012.
9. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. *TEDS report: substance abuse treatment admissions for abuse of benzodiazepines*. 2011. Available at:  
[http://www.samhsa.gov/data/2k11/WEB\\_TEDS\\_028/WEB\\_TEDS-028\\_BenzoAdmissions\\_HTML.pdf](http://www.samhsa.gov/data/2k11/WEB_TEDS_028/WEB_TEDS-028_BenzoAdmissions_HTML.pdf).
10. Substance Abuse and Mental Health Services Administration. *TEDS 1999 - 2009. National admissions to substance abuse treatment services*. Rockville, MD; 2011. Available at: <http://www.dasis.samhsa.gov/teds09/teds2k9nweb.pdf>.
11. Warner, M. Chen, L., Diane M. Makuc, D. M., Anderson, R.N., Miniño, A. M., *Drug Poisoning Deaths in the United States, 1980–2008*.
12. CDC. *Prescription Painkiller Overdoses Policy Impact Brief*. Home and Recreational Safety, Injury Center. Accessed March 23, 2012. Available at <http://www.cdc.gov/homeandrecreationalafety/rxbrief/>.
13. Georgia Bureau of Investigations. *Deaths Related to Prescription Overdoses Continue to Rise*. 2011.  
Available at: [http://gbi.georgia.gov/00/press/detail/0,2668,67862954\\_67866877\\_173600626,00.html](http://gbi.georgia.gov/00/press/detail/0,2668,67862954_67866877_173600626,00.html). Accessed March 23, 2012.
14. Executive Office of the President of the United States of America. *Epidemic: Responding to American's Prescription Drug Abuse Crisis*. 2011. Available at:  
[http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/rx\\_abuse\\_plan.pdf](http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/rx_abuse_plan.pdf). Accessed March 8, 2012.
19. US Government Accountability Office. *Prescription Pain Reliever Abuse: Agencies Have Begun Coordinating Education Efforts, but Need to Assess Effectiveness*. 2011. Available at: <http://www.gao.gov/assets/590/587301.pdf>. Accessed March 8, 2012.
26. Maxey, J. 2012. Personal Communication. Telephone, August 10, 2012.
31. *Information by Drug Class: Opioid Drugs and Risk Evaluation and Mitigation Strategies (REMS)*. Available at:  
<http://www.fda.gov/drugs/drugsafety/informationbydrugclass/ucm163647.htm>. Accessed March 23, 2012.
35. S. 3397 (111th): *Secure and Responsible Drug Disposal Act of 2010* – GovTrack.us. Available at:  
<http://www.govtrack.us/congress/bills/111/s3397>. Accessed March 23, 2012.
37. *Consumer Updates : How to Dispose of Unused Medicines*. Available at: <http://www.fda.gov/forconsumers/consumerupdates/ucm101653.htm#GuidelinesforDrugDisposal>. Accessed March 23, 2012.

38. Dozier, J. Personal Communication. Telephone, August 14, 2012

54. Office of National Drug Control Policy Prescription Drug Monitoring programs

[www.whitehouse.gov/sites/default/files/ondcp/Fact\\_Sheets/pdmp\\_fact\\_sheet\\_4-8-11.pdf](http://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/pdmp_fact_sheet_4-8-11.pdf))

57. Senate Bill 36. Available at: [http://www1.legis.ga.gov/legis/2011\\_12/pdf/sb36.pdf](http://www1.legis.ga.gov/legis/2011_12/pdf/sb36.pdf). Accessed March 23, 2012.

63. Centers for Disease Control and Prevention. Home and Recreational Safety. *Types of Laws*. Available at:

[www.cdc.gov/homeandrecrereationalsafety/Poisoning/laws/laws.html](http://www.cdc.gov/homeandrecrereationalsafety/Poisoning/laws/laws.html). Accessed August, 25, 2012.

64. S. 1760: Pill Mill Crackdown Act of 2011. Available at: <http://www.govtrack.us/congress/bills/112/s1760>. Accessed March 23, 2012.

## INTRODUCTION

According to the Centers for Disease Control and Prevention (CDC), prescription drug abuse is the Nation's fastest growing drug problem, second only to marijuana, and is of epidemic proportion.<sup>1</sup> Misuse of prescription drugs is defined as the use of prescription drugs without a prescription or use that occurred simply for the experience or feeling the drug caused.<sup>2</sup> Prescription drugs taken for non-medical use are now being monitored in similar ways as illicit drugs [including marijuana, cocaine, heroin, hallucinogens and inhalants].

The three most commonly abused types of prescription drugs are:

- 1) opioids—prescribed for pain relief;
- 2) central nervous system depressants—barbiturates and benzodiazepines prescribed for anxiety or sleep problems (often referred to as sedatives or tranquilizers); and
- 3) stimulants—prescribed for attention-deficit hyperactivity disorder (ADHD), the sleep disorder narcolepsy, or obesity.<sup>3</sup>

Data from the 2010 National Survey on Drug Use and Health (NSDUH) report shows that nearly one-third of people aged 12 and over who used drugs for the first time in 2009 began by using a prescription drug non-medically.

## PRESCRIPTION DRUG USE PREVALENCE: U.S.

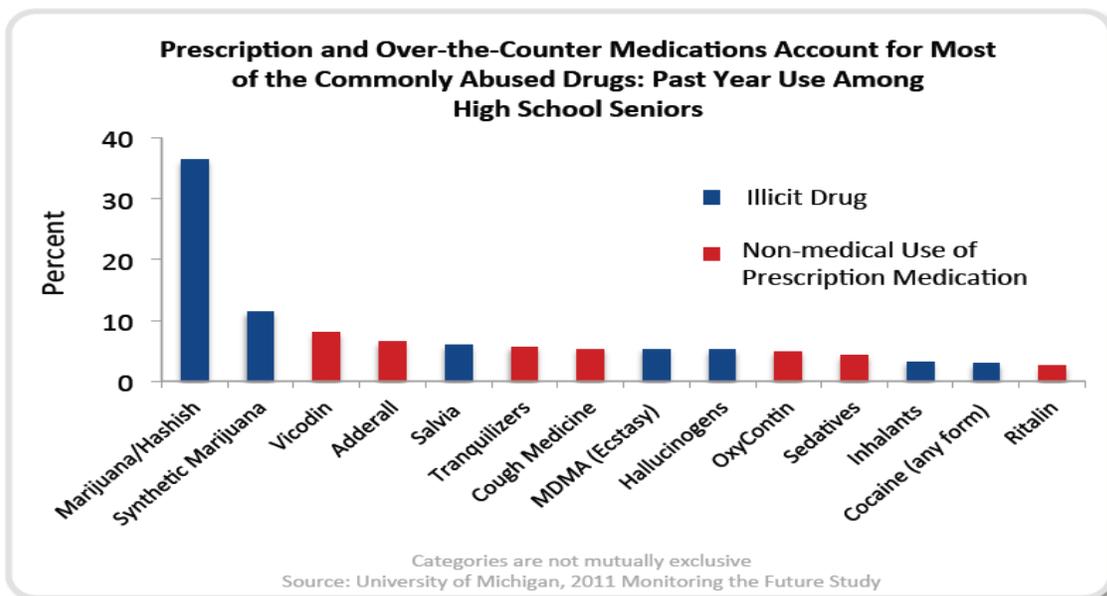
The growing number of first-time users of prescription drugs points to a continuing trend of use. Every year since 2002, 2.5 to 2.8 million Americans have abused prescription drugs for the first time. Since 1990, the number of individuals who take prescription drugs illegally is

believed to have risen by over 500 percent.<sup>3</sup> Data shows that pain relievers are the most frequently abused prescription drug, and pain reliever abuse has risen 20 percent since 2002.

The Monitoring the Future Study (MTF), which surveys 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders in 400 public and private schools across the nation, measures drug, alcohol and cigarette use among students. The survey is funded by National Institute on Drug Abuse (NIDA), a component of the National Institutes of Health (NIH), and conducted by the University of Michigan. According to 2010 MTF results among 12<sup>th</sup> graders nationally, prescription and over-the-counter (OTC) medications are the most commonly abused drugs after nicotine, alcohol and marijuana.<sup>4</sup>

Figure 1 depicts the prevalence of past-year drug use among 12<sup>th</sup> graders. Included among these drugs are prescription pain killers such as Vicodin and Oxycontin, OTC cough medication, as well as medications prescribed to children and adults for attention deficit disorders such as Ritalin and Adderall. The use of nicotine and alcohol were not examined in this comparison.

**Figure 1. Prescription and Over-the-Counter Medications Account for Most of the Commonly Abused Drugs: Past Year Use Among High School Seniors**



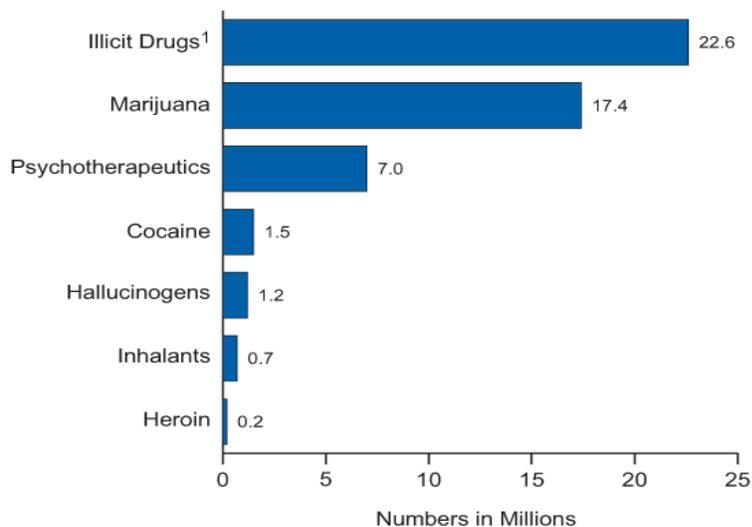
The National Survey on Drug Use and Health (NSDUH) is administered by the U.S. Substance Abuse and Mental Health Services Administration (SAMSHA) and provides national and state-level data on the use of tobacco, alcohol, illicit drugs (including non-medical use of prescription drugs) and mental health in the United States. Approximately 70,000 individuals, aged 12 and older are randomly selected throughout the United States and asked to participate in the survey. The primary objectives of the survey are as follows:

- provide accurate data on the level and patterns of alcohol, tobacco and illegal substance use and abuse;
- track trends in the use of alcohol, tobacco and various types of drugs;
- assess the consequences of substance use and abuse; and
- identify those groups at high risk for substance use and abuse.

The NSDUH obtains information on nine categories of illicit drug use including marijuana, cocaine, heroin, hallucinogens, and inhalants, as well as the nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives. The four categories of prescription-type drugs (pain relievers, tranquilizers, stimulants, and sedatives) include medications which are currently or have been previously available by prescription. They also include drugs within these groupings that originally were prescription medications but currently may be manufactured and distributed illegally, such as methamphetamine. For reporting purposes, the four prescription-type drug groups are combined into a category referred to as "psychotherapeutics."

According to NSDUH, in 2010, an estimated 9.0 million people aged 12 or older (3.6 percent) were current users of illicit drugs other than marijuana. The majority of these users (7.0 million persons or 2.7 percent) were nonmedical users of psychotherapeutic drugs. Of these 7 million users, 5.1 million used pain relievers, 2.2 million used tranquilizers, 1.1 million used stimulants, and 374,000 used sedatives.<sup>3</sup> Figure 2 depicts past month illicit drug use among persons aged 12 or older in 2010 according to drug group.

**Figure 2. Past Month Illicit Drug Use among Persons Aged 12 or Older: 2010**



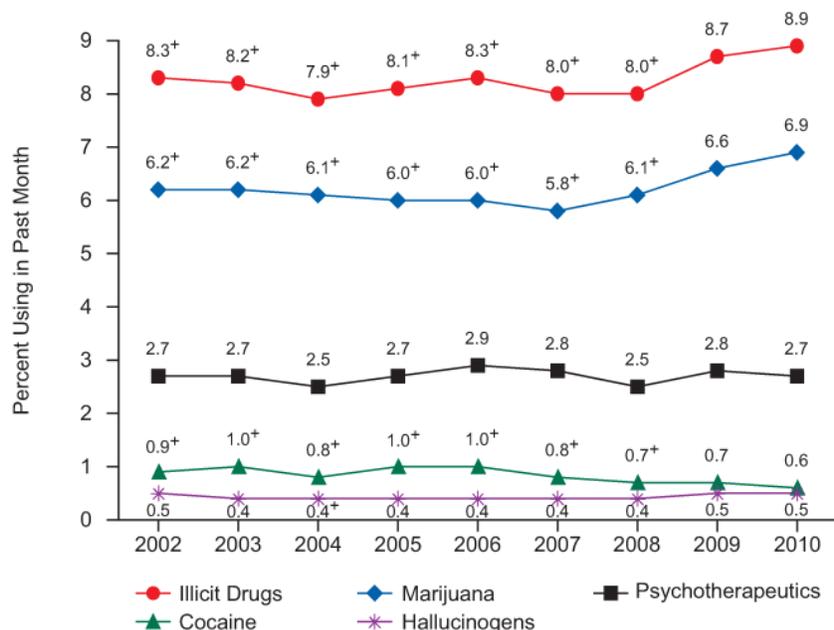
Source: SAMSHA NSDUH 2011

<sup>1</sup> Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

The rate of past month psychotherapeutic drug use among persons 12 and older has remained relatively steady since 2002. The rate of psychotherapeutic drug use was 2.7 percent in both 2002 and 2003, 2.5 percent in 2004, 2.7 percent in 2005, 2.9 percent in 2006, 2.8 percent in 2007, 2.5 percent in 2008, 2.8 percent in 2009, and 2.7 percent in 2010. There were no statistically significant differences in the number of persons aged 12 or older who were current nonmedical users of psychotherapeutic drugs between 2010 (7.0 million or 2.7

percent), 2009 (7.0 million or 2.8 percent) and 2002 (6.3 million or 2.7 percent), indicating that use has remained stable over this time period. Figure 3 depicts past month use of selected illicit drugs, including psychotherapeutics, among persons aged 12 or older for the years 2002-2010.

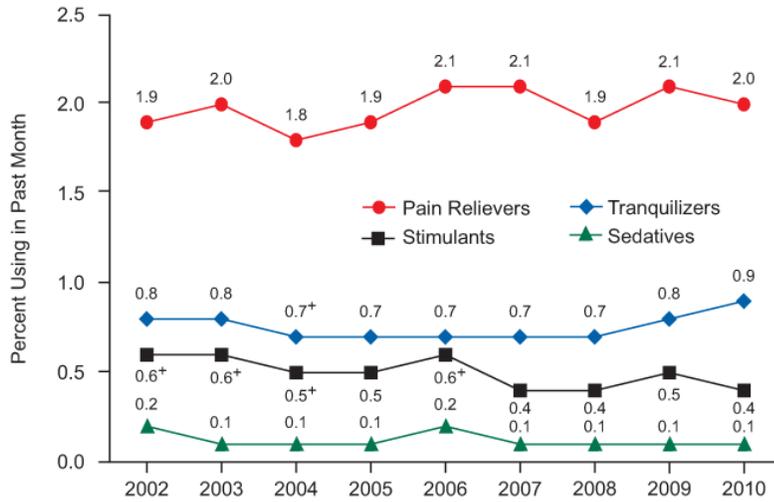
**Figure 3. Past Month Use of Selected Illicit Drugs among Persons Aged 12 or Older: 2002-2010**



Source: SAMSHA NSDUH 2011

The rates of nonmedical use of the four categories of psychotherapeutics between 2002 and 2010 are as follows. Between 2002 and 2010 the rate of pain reliever use ranged from 1.9 to 2.0 percent, the rate of tranquilizer use ranged from 0.7 to 0.9 percent, stimulant use ranged from 0.4 to 0.6 percent and sedative use ranged from 0.1 to 0.2 percent. There were no statistically significant differences in rates of various psychotherapeutics for any years between 2002 and 2010, indicating that the rates of use for each type of psychotherapeutic has remained stable over this time period. Figure 4 depicts past month nonmedical use of psychotherapeutic drugs among persons aged 12 or older between 2002 and 2010.

**Figure 4. Past Month Nonmedical Use of Types of Psychotherapeutic Drugs among Persons Aged 12 or Older 2002-2010**



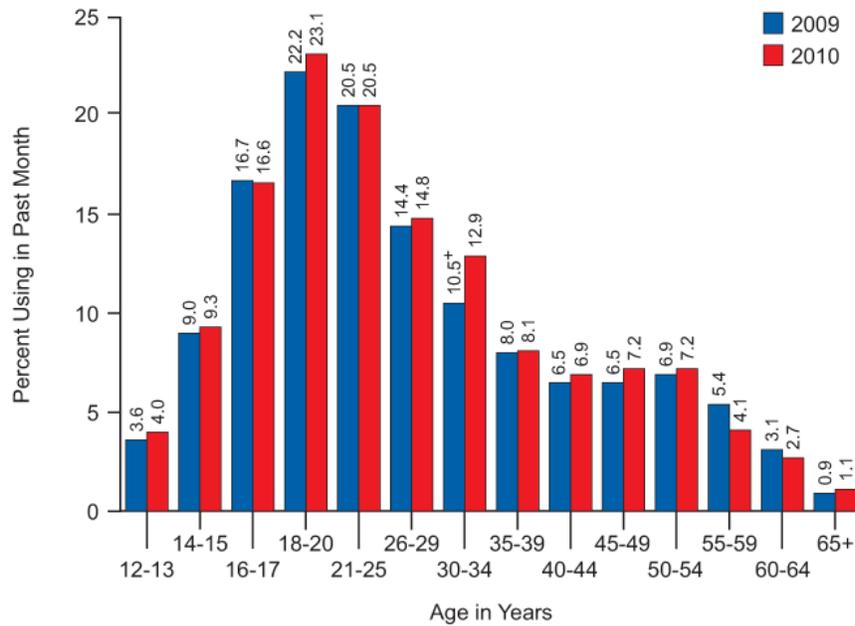
Source: SAMSHA NSDUH 2011

## Illicit Drug Use and Age

The rates of past month illicit drug use vary by age. In 2010, the overall rate of past month illicit drug use among youths age 12 to 17 was 10.1 percent. Within this age group, rates increased with age. The rate of past month use among 12 or 13 year olds was 4.0 percent, followed by 9.3 percent among 14 or 15 year olds and 16.6 percent among 16 or 17 year olds.

The highest rate of past month illicit drug use was among 18 to 20 year olds (23.1 percent), with the next highest rate among 21 to 25 year olds (20.5 percent). Thereafter, the rate generally declined with age. The rate was 14.8 percent among those aged 26 to 29, 12.9 percent among those aged 30 to 34, and 1.1 percent among those aged 65 or older. Figure 5 depicts past month illicit drug use among persons 12 or older in 2009 and 2010 by age group.

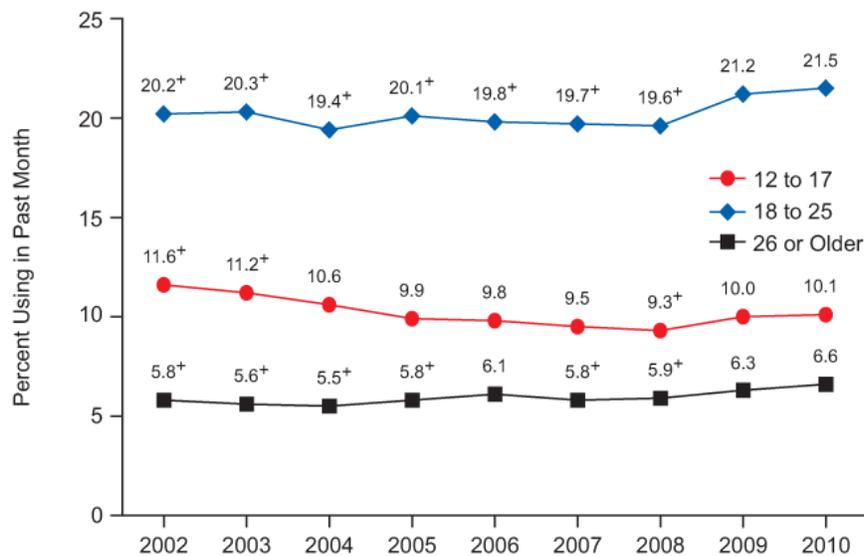
**Figure 5. Past Month Illicit Drug Use among Persons Aged 12 or Older, by Age: 2009 and 2010**



Source: SAMSHA NSDUH 2011

Figure 6 depicts the past month illicit drug use by age group from 2002 to 2010.

**Figure 6. Past Month Illicit Drug Use among Persons Aged 12 or Older, by Age: 2002-2010**



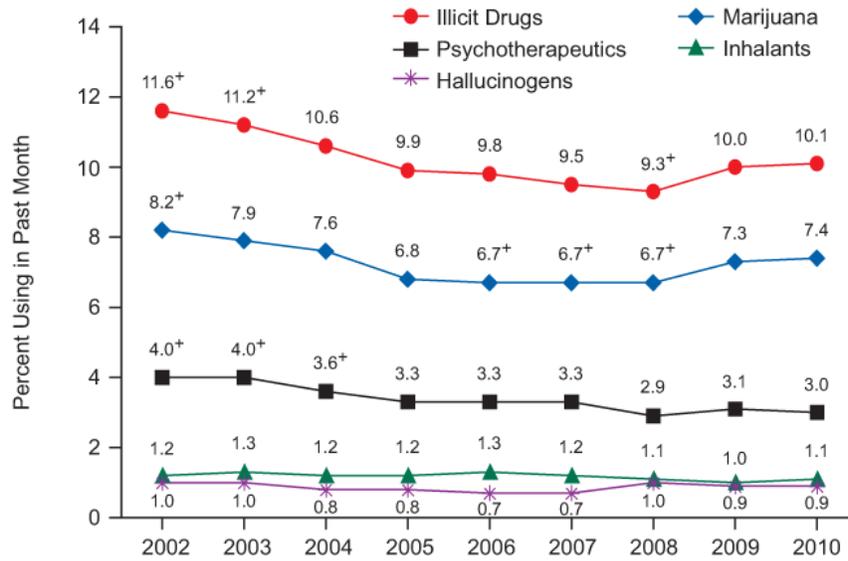
Source: SAMSHA NSDUH 2011

### **Psychotherapeutic Drug Use and Age: 12 to 17 year olds**

Of the 10.1 percent of youths aged 12 to 17 who reported past month illicit drug use, 7.4 percent reported past month use of marijuana, 3.0 percent reported past month use of nonmedical use of psychotherapeutic drugs, 1.1 percent reported past month use of inhalants, 0.9 percent reported past month use of hallucinogens, and 0.2 percent reported past month use of cocaine. Just as the overall rates of illicit drug use increased with age among 12 to 17 year olds, so too did the use of psychotherapeutic drugs. Among 12 or 13 year olds, the highest rate of illicit drug use was use of psychotherapeutics (2.0 percent), followed by inhalants (1.4 percent), and marijuana (0.9 percent). Among 14 or 15 year olds, the rate of psychotherapeutic drug use was second only to marijuana (3.0 percent, and 6.5 percent respectively), followed by inhalants (1.2 percent), and hallucinogens (1.1 percent). Similarly, among 16 and 17 year olds, the rate of marijuana use was highest (14.3 percent) followed by the use of psychotherapeutic drugs (3.9 percent). Additionally, 1.3 percent of 16 and 17 year olds used hallucinogens, 0.6 percent used inhalants, and 0.5 percent used cocaine.

Overall, the nonmedical use of psychotherapeutic drugs has declined in the past decade among 12 to 17 year olds from 4.0 percent in 2002 and 2003 to 3.0 percent in 2010. Figure 7 depicts past month use of illicit drugs among 12 to 17 year olds between 2002 and 2010 according to drug type.

**Figure 7. Past Month Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2010**

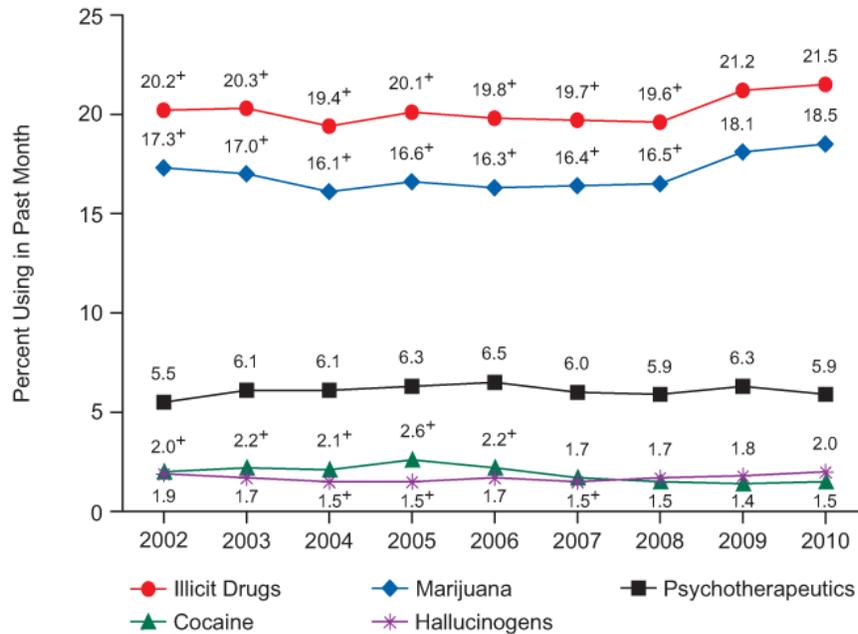


Source: SAMHSA NSDUH 2011

**Psychotherapeutic Drug Use and Age: 18 to 25 year olds**

In addition to having the highest overall rates of illicit drug use, 18 to 25 year olds also had the highest rates of nonmedical use of psychotherapeutics. Among all 18 to 25 year olds in the U.S., rates of use were 18.5 percent for marijuana, 5.9 percent for nonmedical use of psychotherapeutic drugs, 2.0 percent for hallucinogens, and 1.5 percent for cocaine. The rate of psychotherapeutic drug use among this age group in 2010 was similar to the rate of use from 2002 to 2009. Figure 8 depicts the past month use of various illicit drugs, including psychotherapeutics, among 18 to 25 year olds for the years 2002 to 2010.

**Figure 8. Past Month Use of Selected Illicit Drugs among Young Adults Aged 18 to 25: 2002-2010**



Source: SAMHSA NSDUH 2011

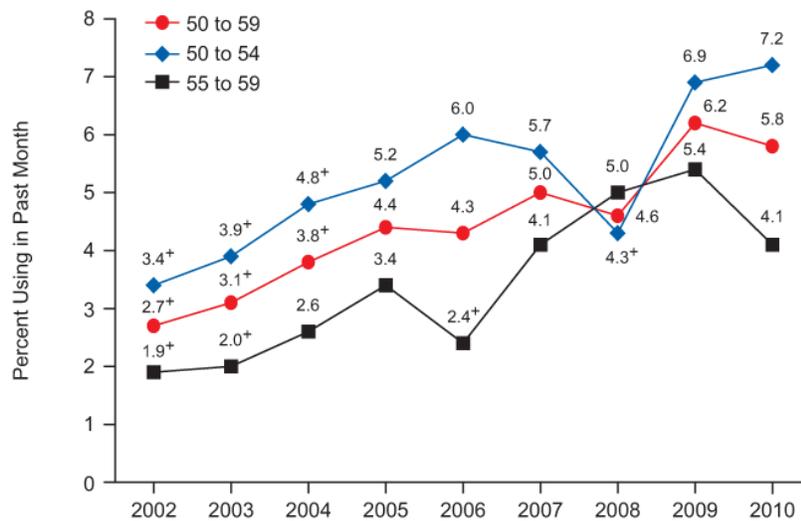
**Psychotherapeutic Drug Use and Age: 26 Years Old and Older**

In 2010, the rate of past month illicit drug use among all adults in the U.S. aged 26 or older was 6.6 percent. Nearly five percent (4.8) were past month users of marijuana and 2.2 percent were past month nonmedical users of psychotherapeutic drugs. Less than one percent used cocaine (0.5 percent), hallucinogens (0.2 percent), heroin (0.1 percent), and inhalants (0.1 percent). These rates were similar to those reported in 2009, with the exception of marijuana. The rate of marijuana use was significantly higher in 2010 than in any given year between 2002 and 2008.

While data was collected on overall illicit drug use among adults aged 50 to 59 (5.8 percent), no data was reported specifically for nonmedical use of prescription drugs. Figure 9 depicts past month illicit drug use among those aged 50 to 59 from 2002 to 2010. The rate of

current illicit drug use among adults aged 50 to 59 increased from 2.7 to 5.8 percent between 2002 and 2010. For those aged 50 to 54, the rate increased from 3.4 percent in 2002 to 7.2 percent in 2010. Among those aged 55 to 59, use increased from 1.9 percent in 2002 to 4.1 percent in 2010. Some of the increase is attributable to the aging of the baby boomer generation (those born between 1946 and 1964) whose rates of illicit drug use have been higher than those of other cohorts.

**Figure 9. Past Month Illicit Drug Use among Adults Aged 50 to 59: 2002-2010**



Source: SAMHSA NSDUH 2011

### **Gender and Illicit Drug Use among those Aged 12 and Older**

In 2010, as in previous years, the rate of past month illicit drug use among males aged 12 or older in the U.S. was higher (11.2 percent) than among females (6.8 percent) aged 12 or older in the U.S. Males were more likely than females to be current users of several different illicit drugs, including marijuana (9.1 vs.4.7 percent), nonmedical use of psychotherapeutic

drugs (3.0 vs. 2.5 percent), cocaine (0.8 vs. 0.4 percent), and hallucinogens (0.6 vs. 0.3 percent). The 2010 rates for both males and females aged 12 or older were similar to those reported in 2009.

### **Gender and Illicit Drug Use among those Aged 12 to 17**

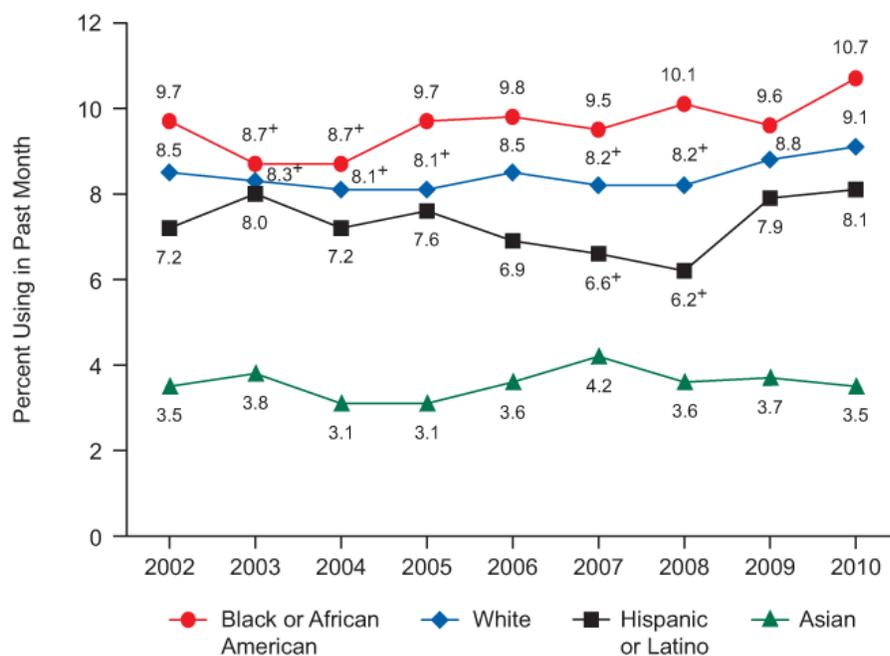
In 2010, the rates of past month illicit drug use were similar between males and females aged 12 to 17 (10.4 percent for males vs. 9.8 percent for females). However, males aged 12 to 17 were more likely than females aged 12 to 17 to be current marijuana users (8.3 vs. 6.4 percent), while females aged 12 to 17 were more likely than males aged 12 to 17 to be current nonmedical users of psychotherapeutic drugs (3.7 vs. 2.3 percent) and current nonmedical users of pain relievers (3.0 vs. 2.0 percent).

### **Race/Ethnicity and Illicit Drug Use among those Aged 12 and Older**

In 2010, the rate of illicit drug use among those 12 and older was lower among Asians (3.5 percent) and Native Hawaiians or Other Pacific Islanders (5.4 percent) than all other racial groups. Illicit drug use was highest among persons of two or more races (12.5 percent) and American Indians (12.1 percent), while illicit drug use among blacks was 10.7 percent. The rate of illicit drug use among Hispanics aged 12 years and older was 8.1 percent, slightly lower than the rate of illicit drug use among whites aged 12 years and older (9.1 percent). While there were no statistically significant differences in the rates of past month illicit drug use between 2009 and 2010 or between 2002 and 2010 for any of the racial/ethnic groups, there were significant increases in the rate for Whites and Hispanics between 2008 and 2010. No specific data for use of psychotherapeutic drugs among the various races was reported. Figure 10

depicts past month illicit drug use among persons 12 or older by race/ethnicity for the years 2002 through 2010.

**Figure 10. Past Month Illicit Drug Use among Persons Aged 12 or Older, by Race/Ethnicity: 2002-2010**



Source: SAMHSA NSDUH 2011

<sup>+</sup> Difference between this estimate and the 2010 estimate is statistically significant at the .05 level.

Note: Sample sizes for American Indians or Alaska Natives and for persons of two or more races were too small for reliable trend presentation for these groups. Due to low precision, estimates for Native Hawaiians or Other Pacific Islanders are not shown.

While the NSDUH report provides substance use data according to race among those aged 12 and older in the U.S., the Monitoring the Future Study (MTF) provides data on substance use among school-aged children specifically. The Monitoring the Future study provides comparisons by race for the largest three ethnic groups: Whites, African Americans, and Hispanics. In order to provide accurate characterizations of each ethnic group, comparisons are made based on a 2 year average for 8th, 10th and 12th graders.<sup>4</sup>

Among 12th graders, African-Americans have consistently shown lower usage rates than Whites for most drugs, both licit and illicit. At the lower grade levels, where few have yet dropped out of school, African-American students also have lower usage rates for many drugs, though not all. Whites tend to have the highest rates of use of a number of drugs, including: marijuana, salvia, hallucinogens, LSD, hallucinogens other than LSD, narcotics other than heroin, OxyContin specifically, Vicodin specifically, amphetamines, Ritalin specifically, Adderall specifically, sedatives (barbiturates) and tranquilizers.

In terms of annual prevalence, Hispanics have tended to have the highest usage rate in 12th grade for a number of the most dangerous drugs such as crack, crystal methamphetamine (ice), heroin in general and heroin with a needle; however, in 2009–2010, Whites had the highest rates of heroin use and African Americans were highest for heroin use with a needle.

In 8th grade, Hispanics had the highest rate of illicit drug use overall and the highest rates for most drugs (though not for amphetamines, Ritalin or Adderall specifically). Hispanics have the highest rates of use for many drugs in 8th grade, but not for as many in 12th, which suggests that their considerably higher dropout rate (compared to Whites and African Americans) may change their relative ranking by 12th grade.

The following tables depict the annual prevalence of drug use among Whites, African Americans, and Hispanics for 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders in 2010. The prevalence is a percent of use among each group and is derived from a two year average.

Table 1. Use of Any Illicit Drug Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders by Race, 2010

	8th	10th	12th
White	14.1	29.2	38.8
African American	15.7	26.6	33.1
Hispanic	18.2	34	34.5

Source: Adapted from Monitoring the Future, 2011

Table 2. Use of Any Illicit Drug Other Than Marijuana 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders by Race, 2010

	8th	10th	12th
White	7.2	13	19.9
African American	4	5	8.3
Hispanic	8.7	13.5	12.8

Source: Adapted from Monitoring the Future, 2011

Table 3. Use of Narcotics Other Than Heroin Among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> Graders by Race, 2010

	12th grade
White	11.1
African American	4
Hispanic	5.1

Source: Adapted from Monitoring the Future, 2011

Table 4. Use of Oxycontin Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders by Race, 2010

	8th	10th	12th
White	2.1	5.3	5.7
African American	4	1.5	2.4
Hispanic	5.1	2.2	4

Source: Adapted from Monitoring the Future, 2011

Table 5. Use of Vicodin Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders by Race, 2010

	8th	10th	12th
White	2.6	8.3	10.4
African American	2	3.4	4.3
Hispanic	3	8.2	6.2

Source: Adapted from Monitoring the Future, 2011

Table 6. Use of Amphetamines Among 8th, 10th and 12th Graders by Race, 2010

	8th	10th	12th
White	4.5	8.5	8.6
African American	2.3	2.8	2.8
Hispanic	3.5	6.3	4.4

Source: Adapted from Monitoring the Future, 2011

Table 7. Use of Adderall Among 8th, 10th and 12th Graders by Race, 2010

	8th	10th	12th
White	2.4	6.6	7.6
African American	1.2	2.2	2.9
Hispanic	1.9	4.2	3.1

Source: Adapted from Monitoring the Future, 2011

Table 8. Use of Provigil Among 8th, 10th and 12th Graders by Race, 2010

	12th grade
White	1.5
African American	1.5
Hispanic	1.5

Source: Adapted from Monitoring the Future, 2011

Table 9. Use of Sedatives (Barbiturates) Among 8th, 10th and 12th Graders by Race, 2010

	12th grade
White	5.8
African American	2.7
Hispanic	3.8

Source: Adapted from Monitoring the Future, 2011

Table 10. Use of Tranquilizers Among 8th, 10th and 12th Graders by Race, 2010

	8th	10th	12th
White	2.9	5.8	7.3
African American	1.2	1.8	2.2
Hispanic	3.3	4.9	3.9

Table 11. Use of Over the Counter Cough/Cold Medicines Among 8th, 10th and 12th Graders by Race, 2010

	8th	10th	12th
White	3.3	5.8	6.4
African American	2.8	2.6	4.6
Hispanic	3.9	5.6	7.1

Source: Adapted from Monitoring the Future, 2011

## Education and Illicit Drug Use

Illicit drug use in 2010 varied according to educational status of adults aged 18 or older. The rate of current illicit drug use was lower among college graduates (6.3 percent) than those with some college education (10.7 percent), high school graduates (8.5 percent), and those who had not graduated from high school (10.8 percent). However, in 2010, adults aged 18 or older who had not finished high school had the lowest rate of lifetime illicit drug use (38.9 percent) compared with the lifetime rate among high school graduates (46.4 percent), those with some college (56.2 percent), and those who were college graduates (52.0 percent).<sup>3</sup>

In 2010, the rate of current use of illicit drugs was 22.0 percent among full-time college students aged 18 to 22. This was similar to the rate among other persons aged 18 to 22 (23.5 percent), which included part-time college students, students in other grades or types of

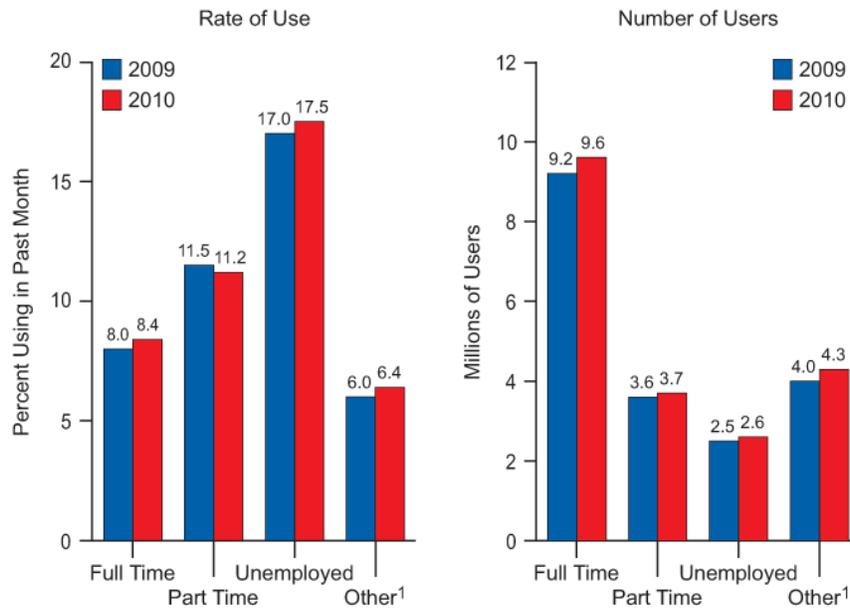
institutions, and nonstudents. Among full-time college students aged 18 to 22, there was a decrease from 2009 to 2010 in the rate of nonmedical use of psychotherapeutic drugs (from 6.3 to 5.0 percent), with the 2010 rate being similar to the rates in 2008 (5.2 percent) and 2002 (5.6 percent).<sup>3</sup>

## **Employment and Illicit Drug Use**

Current illicit drug use differed by employment status in 2010. Among adults aged 18 or older, the rate of current illicit drug use was higher for those who were unemployed (17.5 percent) than for those who were employed full time (8.4 percent) or part time (11.2 percent). Although the rate of current illicit drug use was higher among unemployed persons in 2010 compared with those who were either employed full time, employed part time, or "other" (which includes retired persons, disabled persons, homemakers, students, and other persons not in the labor force); most of these users were employed. Of the 20.2 million current illicit drug users aged 18 or older in 2010, 13.3 million (65.9 percent) were employed either full or part time.<sup>3</sup>

Figure 11 depicts past month illicit drug use among persons aged 18 or older by employment status for the years 2009 and 2010. No information specifically regarding psychotherapeutic drug use by employment status was provided in the report.

**Figure 11. Past Month Illicit Drug Use among Persons Aged 18 or Older, by Employment Status: 2009 and 2010**

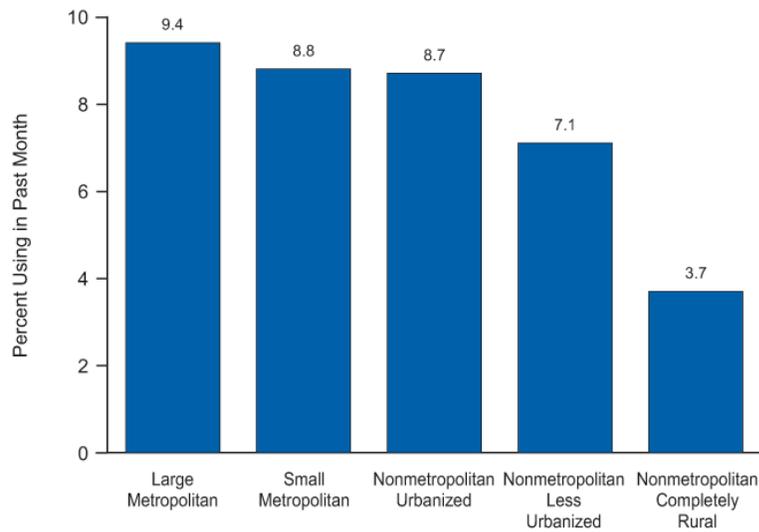


Source: SAMHSA NSDUH 2011

### Geographic Area and Illicit Drug Use Among those Aged 12 or Older

Overall, illicit drug use in 2010 was lower in the southern region of the country and higher among those residing in urban metropolitan areas. Among persons aged 12 or older, the rate of current illicit drug use was 11.0 percent in the West, 9.4 percent in the Northeast, 8.2 percent in the Midwest, and 7.8 percent in the South. The rate of current illicit drug use among persons aged 12 or older was 9.4 percent in large metropolitan counties, 8.8 percent in small metropolitan counties, and 7.5 percent in nonmetropolitan counties as a group. Within nonmetropolitan areas, the rate was 8.7 percent in urbanized counties, 7.1 percent in less urbanized counties, and 3.7 percent in rural counties.<sup>3</sup> No information specifically regarding the use of psychotherapeutic drugs according to region was reported. Figure 12 depicts past month illicit drug use among persons aged 12 or older by county type in 2010.

**Figure 12. Past Month Illicit Drug Use Among Persons Aged 12 or Older by County Type: 2010**

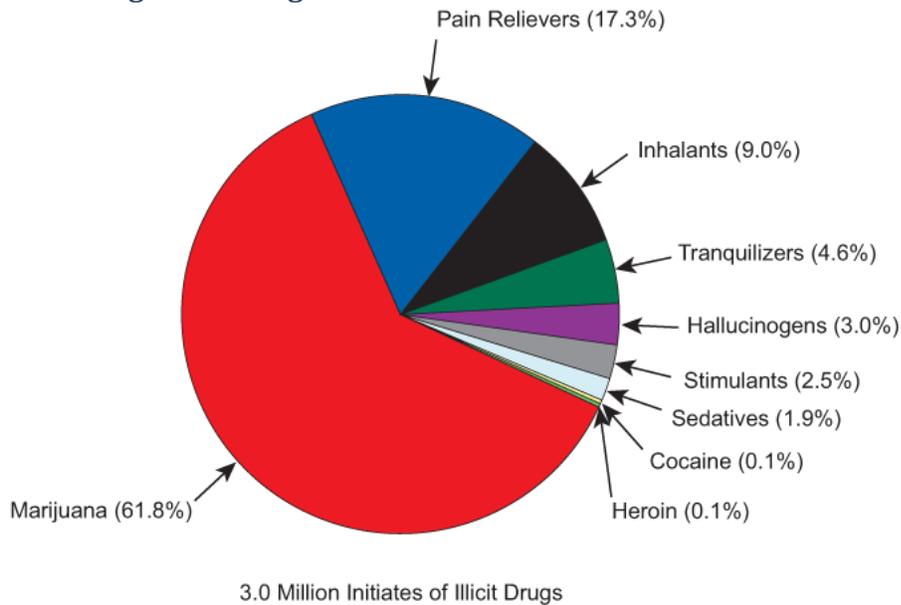


Source: SAMHSA NSDUH 2011

### **Recent Initiates by Drug**

In 2010, the specific illicit drug category with the largest number of recent initiates among persons aged 12 or older was marijuana use (2.4 million), followed by nonmedical use of pain relievers (2.0 million), tranquilizers (1.2 million), Ecstasy (0.9 million), inhalants (0.8 million), and cocaine and stimulants (0.6 million each). While the majority of those aged 12 or older used marijuana as their first illicit drug in 2010 (61.8 percent), the second most frequently used drug of initiation was nonmedical pain relievers.<sup>3</sup>

**Figure 13. First Specific Drug Associated with Initiation of Illicit Drug Use among Past Year Illicit Drug Initiates Aged 12 or Older: 2010**



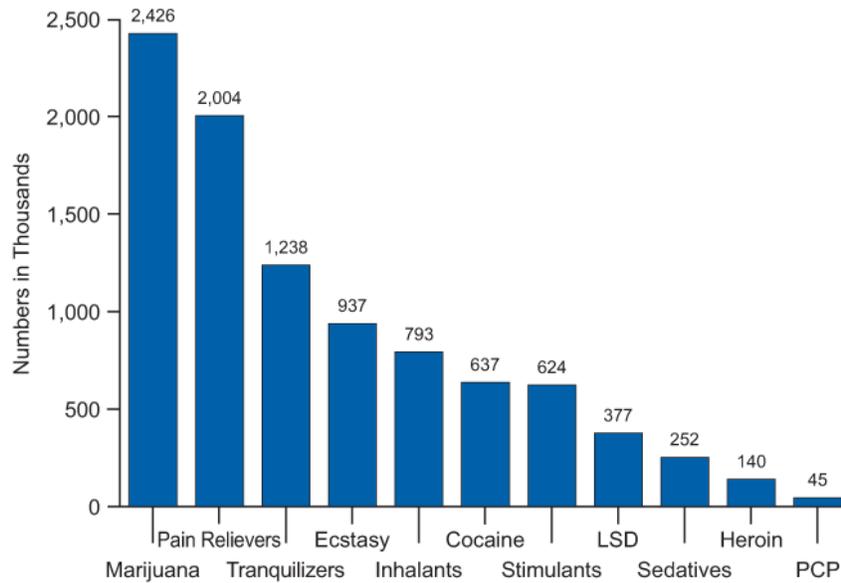
Source: SAMHSA NSDUH 2011

### Psychotherapeutics

Overall, the number of new initiates (past 12 months) of psychotherapeutics in 2010 equaled 2.4 million persons age 12 or older, approximately 6,600 new users per day. This number is similar to the estimate for 2009 (2.6 million) and lower than the 2004 estimate (2.8 million). The number of new users of pain relievers was 2.0 million, followed by 1.2 million initiates of tranquilizers, 624,000 new users of stimulants, and 252,000 new users of sedatives. The number of new users of pain relievers has remained fairly constant since 2005 and has decreased from 2002, 2003, and 2004 levels (2.3 million, 2.5 million, and 2.4 million, respectively). The average age at first nonmedical use of any psychotherapeutics among recent initiates aged 12 to 49 was 22.3 years. More specifically, it was 24.6 years for tranquilizers, 23.5 years for sedatives, 21.2 years for stimulants, and 21.0 years for pain relievers. The number of new nonmedical users of OxyContin® aged 12 or older was 598,000, with an average age at first

use of 22.8 years among those aged 12 to 49.<sup>3</sup> Figure 14 depicts past year initiates of specific illicit drugs among persons aged 12 or older in 2010.

**Figure 14. Past Year Initiates of Specific Illicit Drugs among Persons Aged 12 or Older: 2010**

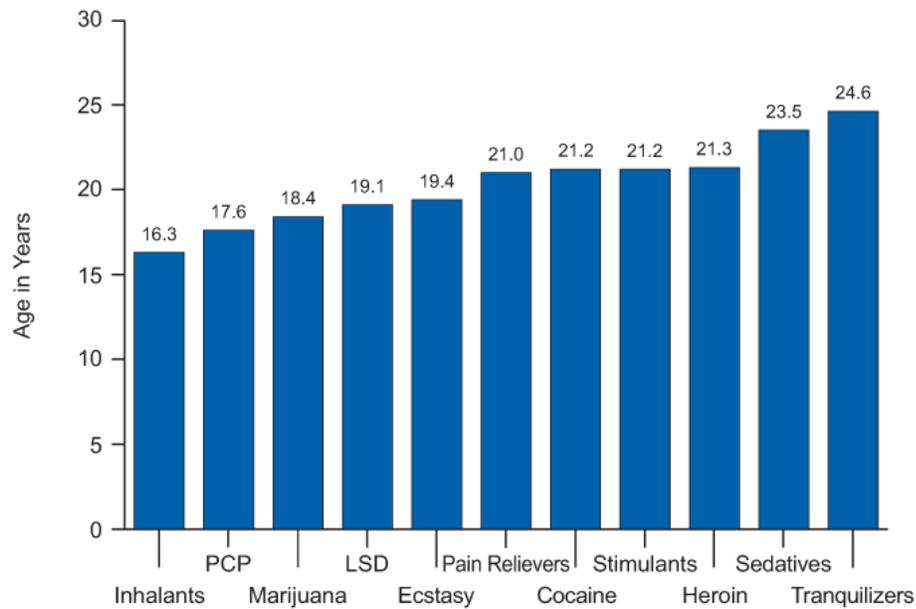


Source: SAMHSA NSDUH 2011

Note: The specific drug refers to the one that was used for the first time, regardless of whether it was the first drug used or not.

Figure 15 depicts the mean age at first use for specific illicit drugs among past year initiates aged 12 to 49.

**Figure 15. Mean Age at First Use for Specific Illicit Drugs among Past Year Initiates Aged 12 to 49: 2010**



Source: SAMHSA NSDUH 2011

The MTF survey results offer additional drug-specific and age-specific data for school-aged children, college students and young adults (ages 19-28).<sup>4</sup> The annual prevalence of use of substances is reported from the time that the survey began collecting data on a particular substance. For example, Ritalin was included in the MTF survey beginning in 2001, and in 2009 a question regarding using Adderall not under doctor's orders was added to the survey. Information regarding use of some substances is only available for those in the 12<sup>th</sup> grade and not for those in lower grades. Trends in annual prevalence of use of various drugs for 8th, 10th, and 12th graders, college students, and young adults (ages 19-28) are presented below. Entries are in percentages.

Table 12. Use of Any Illicit Drug Other Than Marijuana <sup>a, b</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students, and Young Adults, 1991-2010

	8th	10th	12th	college students	young adults
1991	8.4	12.2	16.2	13.2	14.3
1992	9.3	12.3	14.9	13.1	14.1
1993	10.4	13.9	17.1	12.5	13
1994	11.3	15.2	18	12.2	13
1995	12.6	17.5	19.4	15.9	13.8
1996	13.1	18.4	19.8	12.8	13.2
1997	11.8	18.2	20.7	15.8	13.6
1998	11	16.6	20.2	14	13.2
1999	10.5	16.7	20.7	15.4	13.7
2000	10.2‡	16.7‡	20.4‡	15.6‡	14.9‡
2001	10.8	17.9	21.6	16.4	15.4
2002	8.8	15.7	20.9	16.6	16.3
2003	8.8	13.8	19.8	17.9	18.1
2004	7.9	13.5	20.5	18.6	18.8
2005	8.1	12.9	19.7	18.5	18.5
2006	7.7	12.7	19.2	18.1	18.4
2007	7	13.1	18.5	17.3	18.1
2008	7.4	11.3	18.3	15.3	18.9
2009	7	12.2	17.0	16.9	17.4
2010	7.1	12.1	17.3	17.1	18.5
2009 to 2010 change	0.1	0	0.4	.2	1.1
significance of change 2009-2010	not significant	not significant	not significant	not significant	not significant

Source: Adapted from Monitoring the Future, 2011

Table 13. Use of Narcotics Other Than Heroin <sup>c,d</sup> Among 12<sup>th</sup> Graders, College Students and Young Adults, 1991-2010

	12th	College Students	Young Adults
1991	3.5	2.7	2.5
1992	3.3	2.7	2.5
1993	3.6	2.5	2.2
1994	3.8	2.4	2.5
1995	4.7	3.8	3
1996	5.4	3.1	2.9
1997	6.2	4.2	3.3
1998	6.3	4.2	3.4
1999	6.7	4.3	3.8
2000	7	4.5	4.1
2001	6.7‡	5.7‡	5.0‡
2002	9.4	7.4	7.1
2003	9.3	8.7	8.5
2004	9.5	8.2	9
2005	9	8.4	8.7
2006	9	8.8	9.1
2007	9.2	7.7	8.7
2008	9.1	6.5	9.1
2009	9.2	7.6	8.4
2010	8.7	7.2	9
2009 to 2010 change	-0.5	-0.4	0.7
significance of change 2009-2010	not significant	not significant	not significant

Source: Adapted from Monitoring the Future, 2011

Table 14. Use of Oxycontin <sup>c,f,g,h</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students and Young Adults, 2002-2010

	8th	10th	12th	college students	young adults
2002	1.3	3	4	1.5	1.9
2003	1.7	3.6	4.5	2.2	2.6
2004	1.7	3.5	5	2.5	3.1
2005	1.8	3.2	5.5	2.1	3.1
2006	2.6	3.8	4.3	3	3.1
2007	1.8	3.9	5.2	2.8	2.9
2008	2.1	3.6	4.7	3.6	3.9
2009	2	5.1	4.9	5	5.2
2010	2.1	4.6	5.1	2.3	3.2
2009-2010 change	0.1	-0.5	0.2	-2.8	-1.9
significance of change 2009-2010	not significant	not significant	not significant	0.05	0.01

Source: Adapted from Monitoring the Future, 2011

Table 15. Use of Vicodin <sup>c,f,g,h</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students and Young Adults, 2002-2010

Year	8th	10th	12th	college students	young adults
2002	2.5	6.9	9.6	6.9	8.2
2003	2.8	7.2	10.5	7.5	8.6
2004	2.5	6.2	9.3	7.4	8.9
2005	2.6	5.9	9.5	9.6	9.3
2006	3	7	9.7	7.6	9.1
2007	2.7	7.2	9.6	6.7	8.9
2008	2.9	6.7	9.7	6.7	9.1
2009	2.5	8.1	9.7	8.4	8.9
2010	2.7	7.7	8	4.9	7.8
2009-2010 change	0.2	-0.5	-1.7	-3.5	-1.1
significance of change 2009-2010	not significant	not significant	0.05	0.05	not significant

Source: Adapted from Monitoring the Future, 2011

Table 16. Use of Amphetamines <sup>c, e</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students and Young Adults, 1991-2010

	8th	10th	12th	college students	young adults
1991	6.2	8.2	8.2	3.9	4.3
1992	6.5	8.2	7.1	3.6	4.1
1993	7.2	9.6	8.4	4.2	4
1994	7.9	10.2	9.4	4.2	4.5
1995	8.7	11.9	9.3	5.4	4.6
1996	9.1	12.4	9.5	4.2	4.2
1997	8.1	12.1	10.2	5.7	4.6
1998	7.2	10.7	10.1	5.1	4.5
1999	6.9	10.4	10.2	5.8	4.7
2000	6.5	11.1	10.5	6.6	5.4
2001	6.7	11.7	10.9	7.2	5.8
2002	5.5	10.7	11.1	7	5.9
2003	5.5	9	9.9	7.1	5.8
2004	4.9	8.5	10	7	6.2
2005	4.9	7.8	8.6	6.7	5.1
2006	4.7	7.9	8.1	6	5.6
2007	4.2	8	7.5	6.9	5.6
2008	4.5	6.4	6.8	5.7	5.3
2009	4.1	7.1	6.6	7.5	6
2010	3.9	7.6	7.4	9	7.1
2009-2010 change	-0.2	0.5	0.8	1.6	1.1
significance of change 2009-2010	not significant	not significant	not significant	not significant	0.5

Source: Adapted from Monitoring the Future, 2011

Table 17. Use of Ritalin <sup>c, f, g</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students and Young Adults, 2001-2010

	8th	10th	12th	college students	young adults
2001	2.9	4.8	5.1	N/A	N/A
2002	2.8	4.8	4	5.7	2.9
2003	2.6	4.1	4	4.7	2.9
2004	2.5	3.4	5.1	4.7	2.7
2005	2.4	3.4	4.4	4.2	2.5
2006	2.6	3.6	4.4	3.9	2.6
2007	2.1	2.8	3.8	3.7	2.4
2008	1.6	2.9	3.4	3.2	2.4
2009	1.8	3.6	2.1	1.7	1.7
2010	1.5	2.7	2.7	1.9	1.7
2009-2010 change	-0.3	-0.9	0.6	0.2	0
significance of change 2009-2010	not significant	not significant	not significant	not significant	not significant

Source: Adapted from Monitoring the Future, 2011

Table 18. Use of Adderall <sup>c, f, g</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students and Young Adults, 2009-2010

	8th	10th	12th	college students	young adults
2009	2	5.7	5.4	10.2	5.8
2010	2.3	5.3	6.5	9	7
2009-2010 change	0.03	-0.5	1.1	-1.2	1.3
significance of change 2009-2010	not significant	not significant	not significant	not significant	not significant

Source: Adapted from Monitoring the Future, 2011

Table 19. Use of Provigil c, g Among 12th Graders, College Students and Young Adults, 2009-2010

	12th	college students	young adults
2009	1.8	0.2	0.5
2010	1.3	0	0.5
2009-2010 change	-0.5	-0.2	0
significance of change	not significant	not significant	not significant

**Source: Adapted from Monitoring the Future, 2011**

Table 20. Use of Tranquilizers <sup>b, c</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, College Students, and Young Adults 1991-2010

	8th	10th	12th	college students	young adults
1991	1.8	3.2	3.6	2.4	3.5
1992	2	3.5	2.8	2.9	3.4
1993	2.1	3.3	3.5	2.4	3.1
1994	2.4	3.3	3.7	1.8	2.9
1995	2.7	4	4.4	2.9	3.4
1996	3.3	4.6	4.6	2.8	3.2
1997	2.9	4.9	4.7	3.8	3.1
1998	2.6	5.1	5.5	3.9	3.8
1999	2.5	5.4	5.8	3.8	3.7
2000	2.6†	5.6†	5.7†	4.2†	4.6†
2001	2.8	7.3	6.9	5.1	5.5
2002	2.6	6.3	7.7	6.7	7
2003	2.7	5.3	6.7	6.9	6.8
2004	2.5	5.1	7.3	6.7	7.4
2005	2.8	4.8	6.8	6.4	6.7
2006	2.6	5.2	6.6	5.8	6.5
2007	2.4	5.3	6.2	5.5	7.1
2008	2.4	4.6	6.2	5	6.8
2009	2.6	5	6.3	5.4	6.4
2010	2.8	5.1	5.6	4.9	6.3
2009-2010 change	0.2	0	-0.7	-0.5	-0.1
significance of 2009-2010 change	not significant	not significant	not significant	not significant	not significant

**Source: Adapted from Monitoring the Future, 2011**

Table 21. Use of Sedatives (Barbiturates)<sup>c</sup> Among 12<sup>th</sup> Graders, College Students and Young Adults, 1991-2010

	12th	college students	young adults
1991	3.4	1.2	1.8
1992	2.8	1.4	1.6
1992	3.4	1.5	1.9
1994	4.1	1.2	1.8
1995	4.7	2	2.1
1996	4.9	2.3	2.2
1997	5.1	3	2.4
1998	5.5	2.5	2.5
1999	5.8	3.2	2.8
2000	6.2	3.7	3.4
2001	5.7	3.8	3.7
2002	6.7	3.7	3.9
2003	6	4.1	3.9
2004	6.5	4.2	4.4
2005	7.2	3.9	4.2
2006	6.6	3.4	3.9
2007	6.2	3.6	4.2
2008	5.8	3.7	4.7
2009	5.2	3.1	3.8
2010	4.8	2.5	3.3
2009-2010 change	-0.4	-0.6	-0.5
significance level of 2009-2010 change	not significant	not significant	not significant

**Source: Adapted from Monitoring the Future, 2011**

Table 22. Use of OTC Cough/Cold Medicines <sup>f, g</sup> Among 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Graders, 2006-2010

	8th	10th	12th
2006	4.2	5.3	6.9
2007	4	5.4	5.8
2008	3.6	5.3	5.5
2009	3.8	6	5.9
2010	3.2	5.1	6.6
2009-2010 change	-0.6	-0.9	0.7
significance of 2009-2010 change	not significant	not significant	not significant

**Source: Adapted from Monitoring the Future, 2011**

a. For 12th graders, college students, and young adults only: Use of “any illicit drug” includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of narcotics other than heroin, amphetamines, sedatives (barbiturates), or tranquilizers not under a doctor’s orders. For 8th and 10th graders only: The use of narcotics other than heroin and sedatives (barbiturates) has been excluded because these younger respondents appear to over report use (perhaps because they include the use of nonprescription drugs in their answers).

b. In 2001 the question text was changed on half of the questionnaire forms for each age group. “Other psychedelics” was changed to “other hallucinogens” and “shrooms” was added to the list of examples. For the tranquilizer list of examples, Miltown was replaced with Xanax. For 8th, 10th, and 12th graders only: The 2001 data presented here are based on the changed forms only; N is one half of N indicated. In 2002 the remaining forms were changed to the new wording. The data are based on all forms beginning in 2002. Data for any illicit drug other than marijuana and data for hallucinogens are also affected by these changes and have been handled in a parallel manner.

c. Only drug use not under a doctor’s orders is included here.

d. For 12th graders, college students, and young adults only: In 2002 the question text was changed in half of the questionnaire forms. The list of examples of narcotics other than heroin was updated: Talwin, laudanum, and paregoric—all of which had negligible rates of use by 2001—were replaced with Vicodin, OxyContin, and Percocet. The 2002 data presented here are based on the changed forms only; N is one half of N indicated. In 2003, the remaining forms were changed to the new wording. The data are based on all forms beginning in 2003.

e. In 2009, the question text was changed slightly in half of the forms. An examination of the data did not show any effect from the wording change. In 2010 the remaining forms were changed in a like manner.

f. For 8th and 10th graders only: Data based on one of four forms; N is one third of N indicated.

g. For 12th graders, college students, and young adults only: Data based on two of six forms; N is two sixths of N indicated. For college students and young adults only: Salvia data based on one of six forms; N is one sixth of N indicated.

h. For 12<sup>th</sup> graders only: Data based on two of six forms in 2002-2005; N is two sixths of N indicated. Data based on three of six forms beginning in 2006; N is three sixths of N indicated

“—” indicates data not available.

“‡” indicates some change in the question. See relevant footnote for that drug. See relevant figure to assess the impact of the wording changes.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

## **PRESCRIPTION DRUG PREVALENCE: GEORGIA**

The most recently available state level data for use of psychotherapeutics from SAMSHA is for the years 2008-2009.<sup>5</sup> Overall estimates for illicit drug use include use of marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, and prescription-type drugs used nonmedically (psychotherapeutics). In 2008-2009 an estimated 617,000 (7.91 percent) Georgians aged 12 and older were current users of illicit drugs. This figure includes 67,000 (8.17 percent) Georgians aged 12 to 17, 200,000 Georgians aged 18 to 25 (19.69 percent), and 350,000 (5.87 percent) Georgians aged 26 and older. An estimated 361,000 (4.62 percent) Georgians aged 12 and older reported using pain relievers nonmedically. Of the 361,000 users, 51,000 (6.24 percent) were 12 to 17 years old, 120,000 were between 18 and 25 (11.85 percent), and 189,000 (3.17 percent) were 26 years of age and older.<sup>6</sup>

The following information provides a comparison between 2002-2003 nonmedical use of pain relievers and 2008-2009 data in order to identify trends of drug use over time. In Georgia, 5.12 percent of persons aged 12 and over reported past year nonmedical use of pain relievers in 2002-2003, as compared to 4.62 percent in 2008-2009, a difference that was not

statistically significant. Among 12-17 year olds in Georgia, past year use in 2002-2003 was 8.41 percent and showed a statistically significant decrease to 6.24 percent in 2008-2009. The highest rates in 2002-2003 (10.66 percent) and 2008-2009 (11.85 percent) were among 18-25 year olds, though there was no significant change in rates between the two time periods. There was also no significant change in rates among those 26 years of age and older for 2002-2003 (3.64 percent) and 2008-2009 (3.17 percent).<sup>6</sup>

For the purposes of comparison, Georgia was divided into five substate regions as defined by the Georgia Department of Human Resources in terms of the 159 counties. Table 23 provides a list of the counties contained in each of the five substate regions in Georgia.

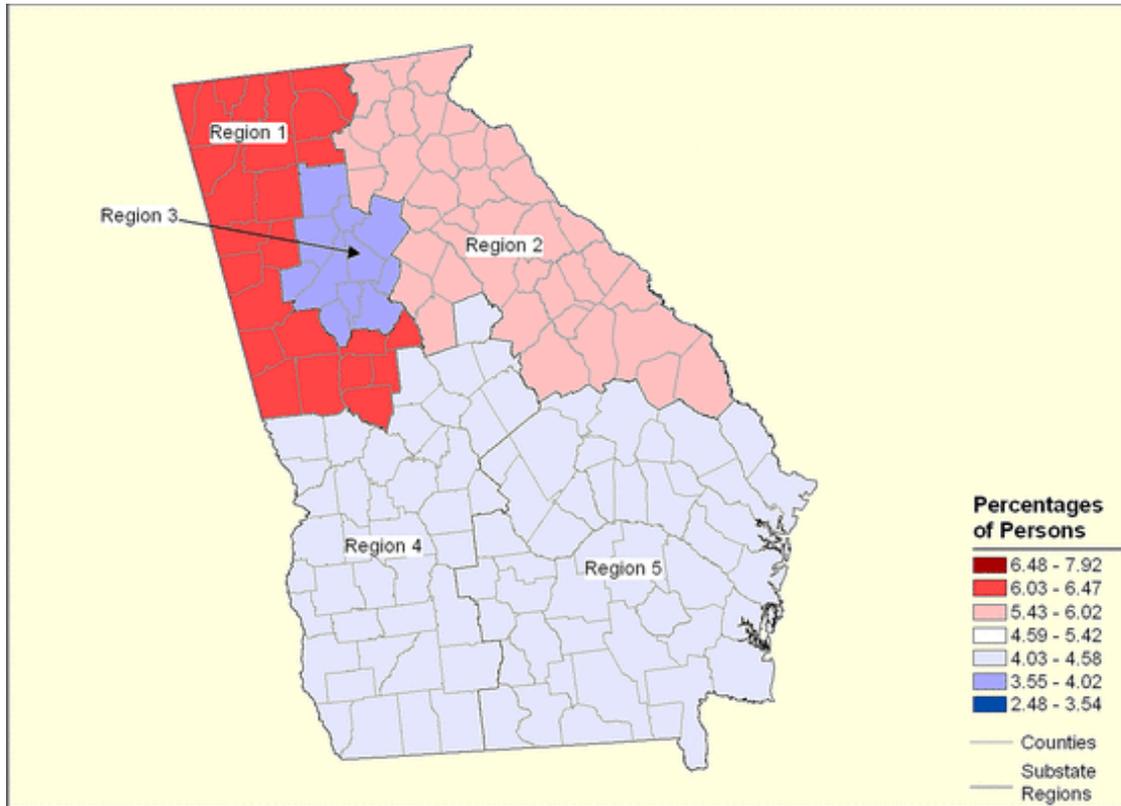
Table 23. Substate Regions as Defined by the Georgia Department of Human Resources in Terms of the 159 counties

Region 1		Region 2		Region 3		Region 4		Region 5	
Bartow	Lamar	Banks	Lumpkin	Cherokee	Fayette	Baker	Miller	Appling	Glynn
Butts	Meriwether	Barrow	Madison	Clayton	Fulton	Baldwin	Mitchell	Atkinson	Irwin
Carroll	Murray	Burke	McDuffie	Cobb	Gwinnett	Bibb	Monroe	Bacon	Jeff Davis
Catoosa	Paulding	Clarke	Morgan	De Kalb	Henry	Calhoun	Muscogee	Ben Hill	Johnson
Chattooga	Pickens	Columbia	Newton	Douglas	Rockdale	Chattahoochee	Peach	Berrien	Lanier
Coweta	Pike	Dawson	Oconee			Clay	Pulaski	Bleckley	Laurens
Dade	Polk	Elbert	Oglethorpe			Colquitt	Putnam	Brantley	Liberty
Fannin	Spalding	Forsyth	Rabun			Crawford	Quitman	Brooks	Long
Floyd	Troup	Franklin	Richmond			Crisp	Randolph	Bryan	Lowndes
Gilmer	Upson	Glascocock	Screven			Decatur	Schley	Bulloch	McIntosh
Gordon	Walker	Greene	Stephens			Dooly	Seminole	Camden	Montgomery
Haralson	Whitfield	Habersham	Taliaferro			Dougherty	Stewart	Candler	Pierce
Heard		Hall	Towns			Early	Sumter	Charlton	Tattnall
		Hancock	Union			Grady	Talbot	Chatham	Telfair
		Hart	Walton			Harris	Taylor	Clinch	Tift
		Jackson	Warren			Houston	Terrell	Coffee	Toombs
		Jasper	Washington			Jones	Thomas	Cook	Treutlen
		Jefferson	White			Lee	Twiggs	Dodge	Turner
		Jenkins	Wilkes			Macon	Webster	Echols	Ware
		Lincoln				Marion	Wilkinson	Effingham	Wayne
							Worth	Emanuel	Wheeler
								Evans	Wilcox

Source: SAMSHA NSDUHS Nonmedical Use of Pain Relievers in Substate Regions: 2004-2006

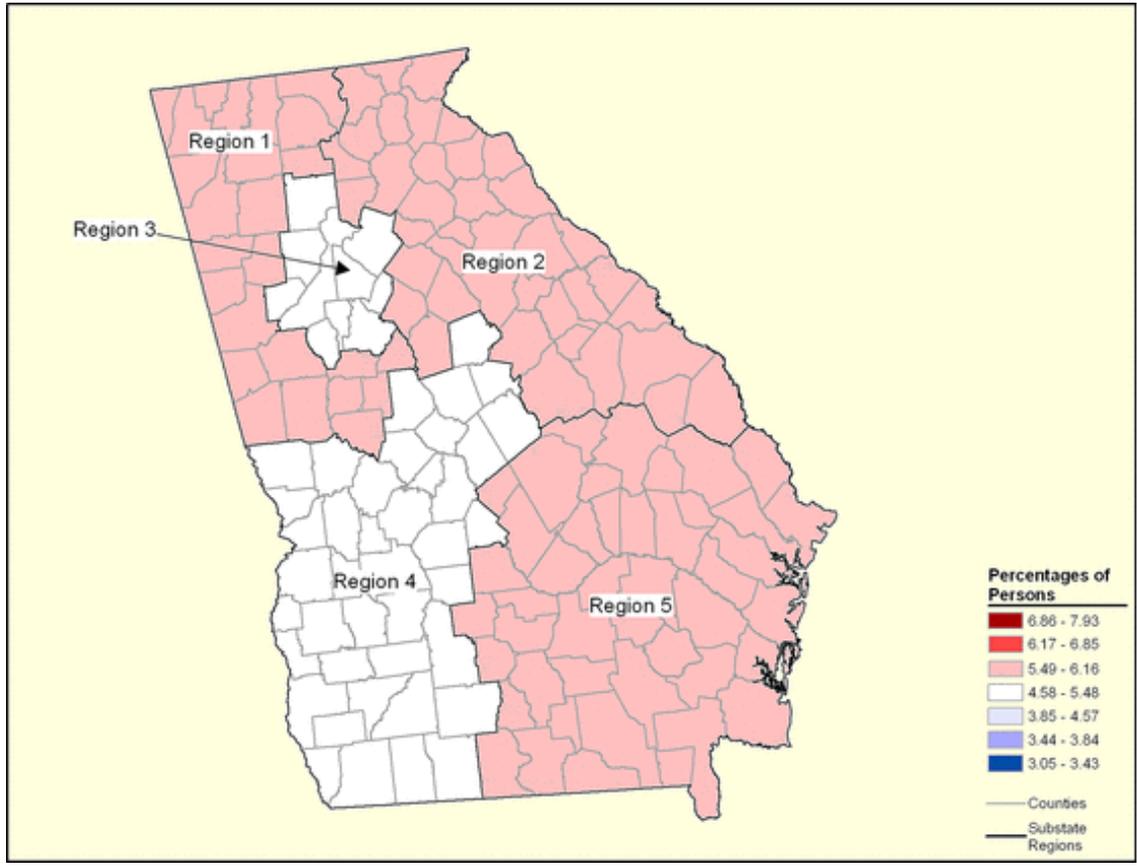
As described in the figures and table below, the overall percentage of persons 12 years of age and older who used pain relievers for nonmedical purposes increased from 4.65 percent in 2004-2006 to 5.31 percent in 2006-2008.<sup>2,6</sup> While the percentage of past year use in substate Region 1 decreased, the percentage in Regions 2-5 increased.

**Figure 16. Nonmedical Use of Pain Relievers in Past Year among Persons Aged 12 or Older in Georgia, by Substate Region: Percentages, Annual Averages Based on 2004, 2005, and 2006 NSDUHs**



Source: Adapted from SAMSHA NSDUHS Nonmedical Use of Pain Relievers in Substate Regions: 2004-2006

**Figure 17. Nonmedical Use of Pain Relievers in Past Year among Persons Aged 12 or Older in Georgia, by Substate Region: Percentages, Annual Averages Based on 2006, 2007, and 2008 NSDUHs**



Source: Adapted from SAMSHA Georgia - Substate Estimates from the 2006-2008 NSDUH

Table 24 provides a side by side comparison of rates of nonmedical use of pain relievers in the past year among persons aged 12 or older in Georgia, by substate region in 2004-2006 and 2006-2008.

Table 24. Comparison of Nonmedical Use of Pain Relievers in Past Year Among Persons Aged 12 or Older in Georgia, by Substate Region between 2004-2006 and 2006-2008

2004-2006: Georgia Overall: 4.65	2006-2008: Georgia Overall: 5.31
Region 1: 6.47	5.70
Region 2: 5.70	5.74
Region 3: 3.81	4.90
Region 4: 4.31	5.30
Region 5: 4.58	5.72

In order to present a more comprehensive picture of drug use in the state of Georgia, the Burruss Institute of Public Policy and Research at Kennesaw State University requested access to NSDUH data. Though SAMSHA would not provide access to the raw data, they did provide the Burruss Institute with estimates of the average number of users of various substances among Georgians aged 12 and older for the years 2002 through 2008. Estimates were also provided for substance use among various demographic subgroups.<sup>7</sup>

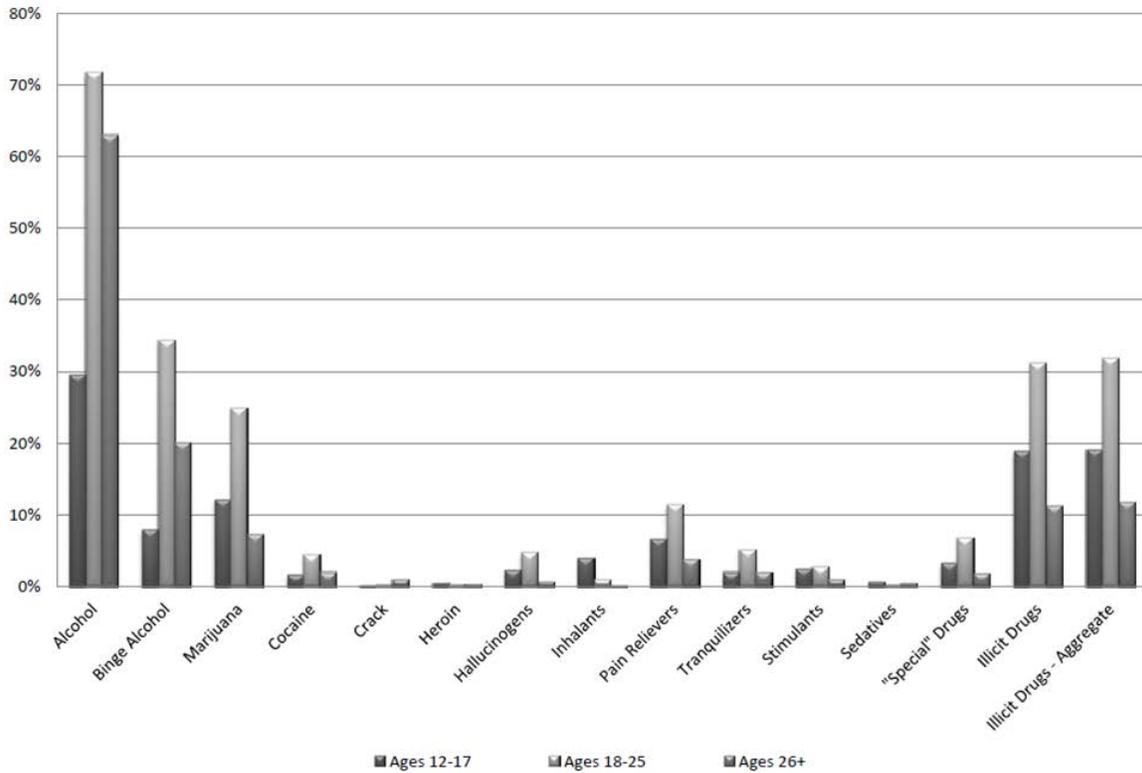
The substances examined in this report include the following: alcohol, marijuana, cocaine (all forms), crack, heroin, hallucinogens, inhalants, pain relievers, tranquilizers, stimulants, sedatives, and “special drugs”. The special drug category includes both prescription and nonprescription drugs including: GBH, Adderall, Ambien, non-prescription cold and cough medicines, ketamine, DMT, AMT (Foxy), and Salvia divinorum. The category “illicit drugs” includes marijuana, cocaine/crack, heroin, hallucinogens, and inhalants, as well as

psychotherapeutics used nonmedically. The category “illicit drugs (aggregate)” includes the drugs listed under illicit drugs as well as those listed in the “special drug” category.

### **Substance Abuse by Age in Georgia**

Between 2002 and 2008, it is estimated that each year slightly over 1 million Georgians used illicit drugs and 1.1 million used illicit drugs including “special drugs”. Approximately 374,000 Georgians abused pain killers each year, 199,000 used “special drugs” and approximately 173,000 abused tranquilizers. For youth ages 12 to 17, nearly one out of every five (18.8 percent) used at least one of the illicit drugs and slightly more (19.1 percent) used illicit drugs including “special drugs”. Nearly seven percent (6.6 percent) used pain relievers nonmedically. As is true nationally, 18 to 25 year olds had the highest rates of illicit drug use in Georgia (31.2 percent) and the highest rate of use of prescription pain relievers (11.4 percent). Among adults aged 26 or older, rates of illicit drug use were significantly lower (11 percent).<sup>7</sup> Figure 18 presents the estimated average annual percentage of users of various drugs by age group for the years 2002-2008.

**Figure 18. Estimated Average Annual Percentage of Users, 2002-2008 by Age Group (percent in each category who use given substance)**

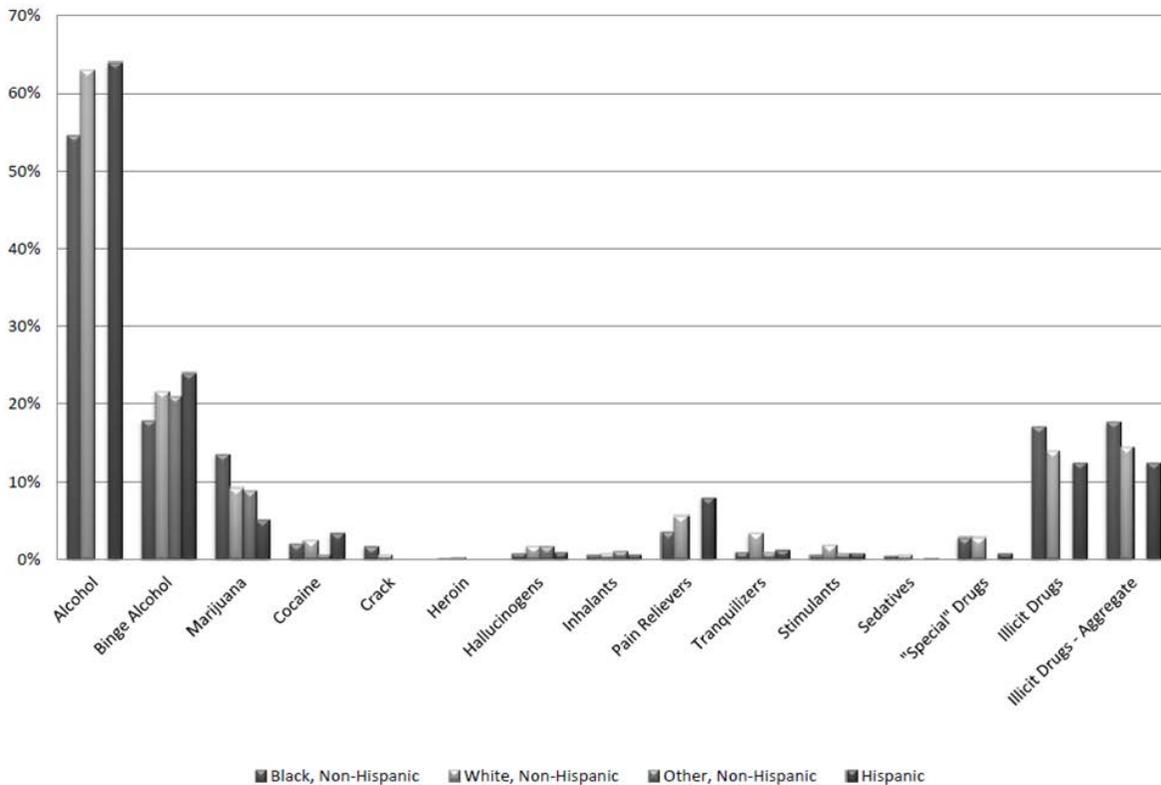


Source: Burruss Institute of Public Policy and Research at Kennesaw State University

### **Substance Abuse by Ethnicity in Georgia**

Overall, illicit drug use in Georgia was slightly higher among blacks (17 percent), than whites (13.9 percent) or Hispanics (12.4 percent). Hispanics were significantly more likely to have abused pain relievers than blacks (7.9 percent vs. 3.5 percent respectively). Figure 19 presents the estimated average annual percentage of users of various drugs by ethnicity for the years 2002-2008.

**Figure 19. Estimated Average Annual Percentage of Users 2002-2008 by Ethnicity (percent in each category who use given substance)**

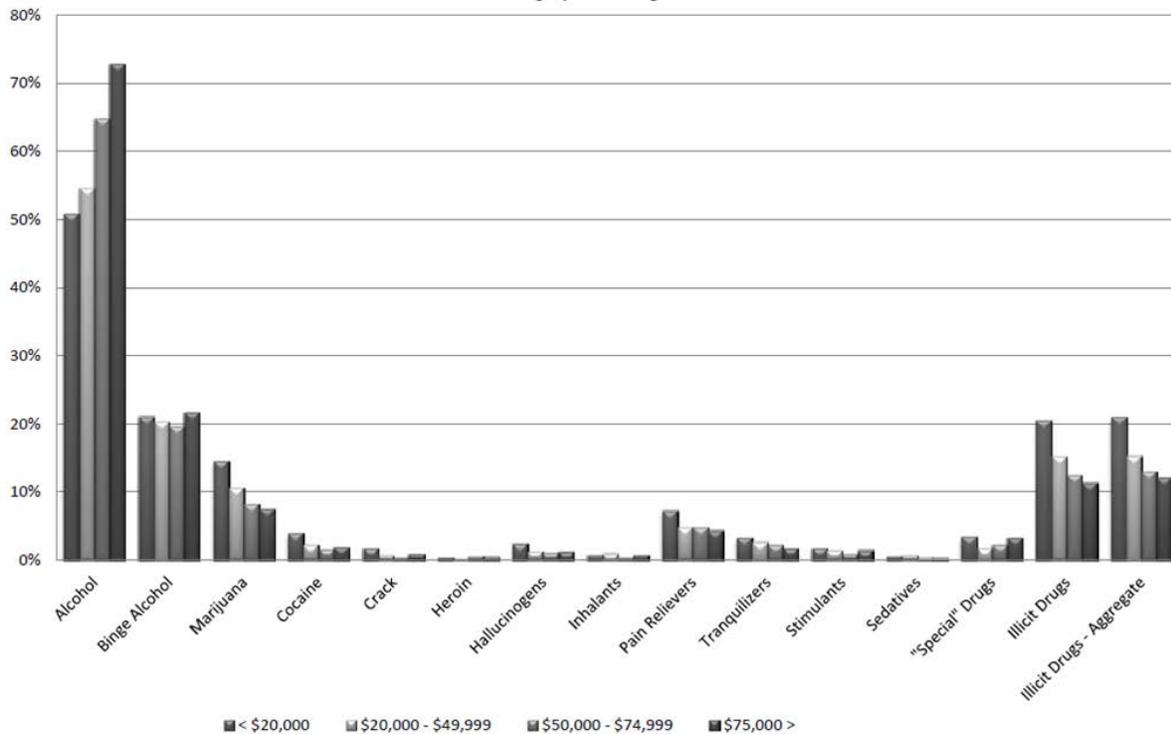


Source: Burruss Institute of Public Policy and Research at Kennesaw State University

### Substance Abuse by Income and Employment in Georgia

While it is estimated that alcohol use increases with income in Georgia, persons with lower incomes (under 20,000 per year) were more likely to have used illicit drugs. Over 20 percent (20.4) of Georgians with incomes under \$20,000 in any given year used an illicit drug as compared with 11.3 percent of those with incomes over \$75,000.<sup>7</sup> Figure 20 presents the estimated annual percentage of users of various drugs by income level for the years 2002-2008.

**Figure 20. Estimated Annual Percentage of Users 2002-2008 by Income Level (percent in each category who use given substance)**

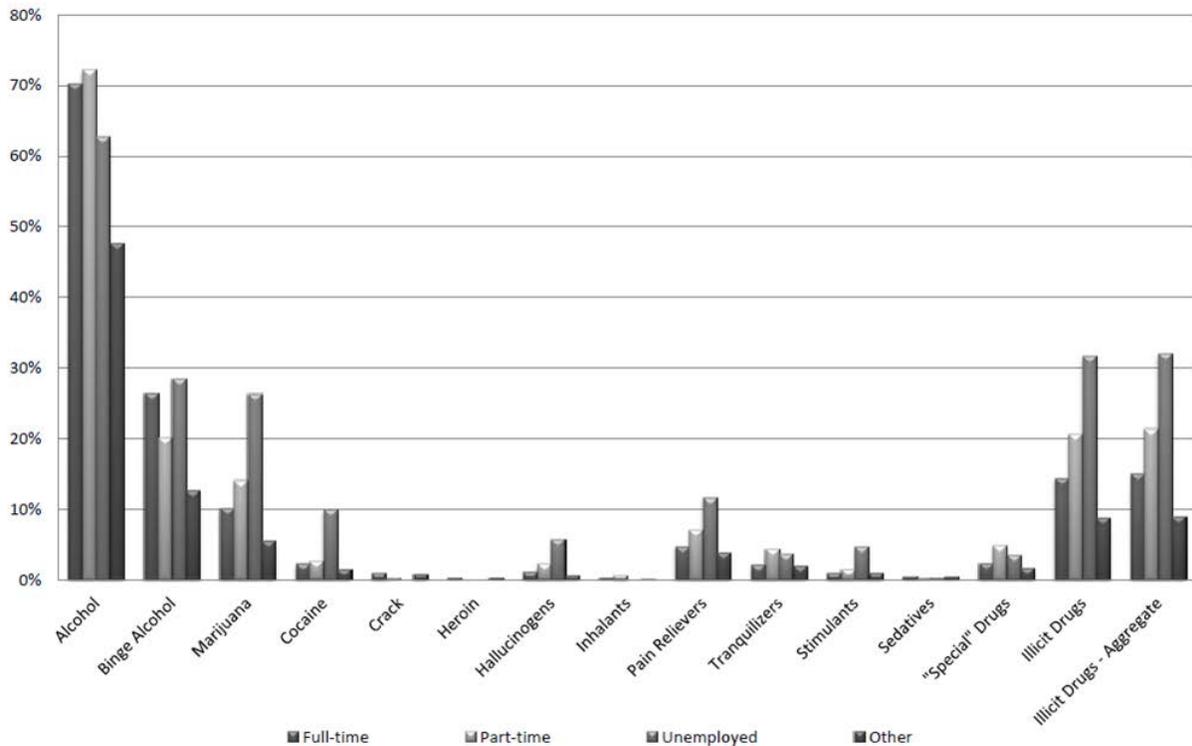


Source: Burruss Institute of Public Policy and Research at Kennesaw State University

The data also demonstrates that employment status is associated with illicit substance use, including pain relievers, in Georgia. Unemployed Georgians were more likely to have abused illicit drugs, including “special drugs”. From 2002-2008, nearly one-third of unemployed Georgians (31.7 percent) used illicit drugs in any given year. This percentage is significantly higher among the unemployed (31.7) than among those employed part-time (20.6 percent), full-time (14.4 percent) and other Georgians (8.8 percent). While the majority of unemployed illicit drug users reported marijuana use (26.4 percent), they were also more likely than other Georgians to use stimulants (4.7 percent), hallucinogens (5.8 percent), cocaine (9.9 percent)

and pain relievers (11.7 percent).<sup>7</sup> Figure 21 presents the estimated average annual percentage of users of various drugs according to employment status for the years 2002-2008.

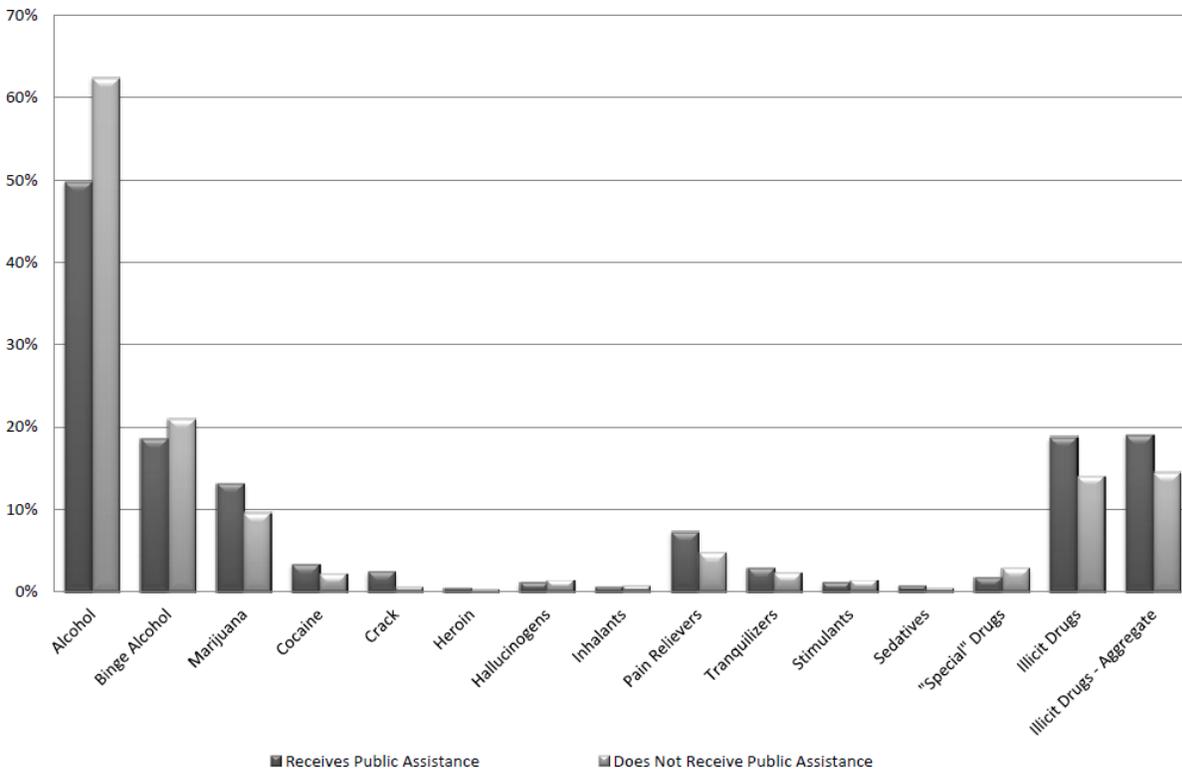
**Figure 21. Estimated Average Annual Percentage of Users, 2002-2008 by Employment Status (percent in each category who use given substance)**



Source: Burruss Institute of Public Policy and Research at Kennesaw State University

Additionally, analysis of substance abuse among those receiving public assistance in Georgia found that those receiving public assistance were slightly less likely to abuse illicit drugs (14.4 percent vs.18.8 percent), marijuana (9.6 percent vs. 13.1 percent), cocaine (2.1 percent vs. 3.3 percent), crack (2.4 percent vs. 0.5 percent) and pain relievers (7.3 percent vs. 4.7 percent).<sup>7</sup> Figure 22 presents the estimated average annual percentage of users of various drugs according to whether or not they received public assistance for the years 2002-2008.

**Figure 22. Estimated Average Annual Percentage of Users 2002-2008 by Whether or not Person Receives Public Assistance (percent in each category who use given substance)**



Source: Burruss Institute of Public Policy and Research at Kennesaw State University

### **Prescription Drug Use Among Youth in Georgia**

The Georgia Student Health Survey (GSHS) is administered through school districts in the State of Georgia. The primary purpose of the GSHS is to examine annual behaviors and beliefs pertaining to student health. The survey is administered to 6<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> graders and the intent is to gather information and determine trends that might encourage risky behaviors. Specifically, it asks students questions pertaining to school climate, drug and alcohol use in the last thirty days, accessibility of drugs and alcohol, age of first use of drugs and alcohol, perception of how harmful drugs and alcohol are to the body, students' perceptions of

adult disapproval, locations where students use drugs and alcohol, risky behaviors within the last 30 days, nutrition information and student information pertaining to health education and other behaviors. The other behaviors include, but are not limited to, such questions as dropping out of school, amount of time spent watching TV, instant messaging, willingness to intervene in bullying situations, suicidal ideation, safety at home and the ability to seek out an adult if in need.

One of the reasons the GSHS is helpful in reviewing health trends of students is because of the large number of students that participate in the survey. The testing instrument aims to sample the school population because it does not capture every student's response. Since the survey was administered across the state of Georgia, it is safe to assume that the responses were representative of students' beliefs from varying backgrounds including rural, suburban and urban areas.

The following tables depict GSHS 2010-2011 data gathered for questions that relate specifically to nonmedical use of prescription drugs among Georgia students by grade. The mean age at onset of use of prescription drugs for both males and females was 12.74 years.<sup>8</sup>

The large majority of student respondents in all grades reported that they had not used prescription drugs not prescribed to them in the past 30 days. However, (1,020) 6th graders, (1,859) 8th graders, (1,832) 9th graders, (2,330) 10th graders, (2,164) 11th graders and (2,402) 12th graders reported having used prescription drugs not prescribed to them at least once during the past 30 days. Students in higher grades tended to report a higher prevalence of prescription drug use, as well as higher frequencies of use. Table 25 presents the percentage of

students in each grade according to the number of days they have used prescription drugs not prescribed to them in the past 30 days.<sup>8</sup>

Table 25. Prescription Drug Use During Last 30 Days

“I used prescription drugs not prescribed to me, past 30 days...”

Table of Grade by Prescription Drug Use								
Grade	Prescription ( Prescription drugs not prescribed to me, past 30 days)							Total (N)
	0 Days	1 or 2 Days	3 or 5 Days	6 or 9 Days	10 or 19 Days	20 or 29 Days	All 30 Days	
6	98.50%	0.65%	0.21%	0.10%	0.18%	0.19%	0.16%	68,009
8	97.13%	1.05%	0.48%	0.21%	0.39%	0.41%	0.33%	64,803
9	95.91%	1.50%	0.66%	0.33%	0.50%	0.59%	0.51%	44,803
10	94.40%	1.78%	0.88%	0.49%	0.72%	0.75%	0.97%	41,621
11	93.87%	2.00%	1.17%	0.58%	0.93%	0.71%	0.74%	34,917
12	93.39%	2.18%	1.29%	0.58%	1.02%	0.79%	0.76%	36,347
<b>Total (N)</b>	278,913	4,029	1,999	966	1,594	1,510	1,489	290,500

Source: Adapted from Georgia Student Health Survey 2010-2011

Student-reported ease of access to prescription drugs was also higher among high school students than among middle school students. Ease of access to prescription drugs increased according to students’ grade and nearly 40 percent (36.9%) of 12 graders reported that they strongly agreed it was easy to obtain prescription drugs not prescribed to them. Similar percentages were found among 10<sup>th</sup> graders (32 percent) and 11<sup>th</sup> graders (34.7 percent), while over a quarter of 9<sup>th</sup> graders (26.9 percent) strongly agreed it was easy to obtain prescription medicines not prescribed to them.

Table 26. Ease of Obtaining Prescription Drugs

“It is easy for me to get prescription medicines that were not prescribed for me”

Table of Prescription Ease by Grade							
Prescription Ease “It is easy to get prescription medicines that were not prescribed to me”	Prescription ( Prescription drugs not prescribed to me, past 30 days)						Total (N)
	6	8	9	10	11	12	
<b>Strongly Agree</b>	10.44%	19.36%	26.85%	32.01%	34.74%	36.93%	70,547
<b>Somewhat Agree</b>	8.39%	14.63%	18.72%	20.18%	20.97%	21.64%	47,160
<b>Somewhat Disagree</b>	8.73%	11.60%	12.01%	11.37%	11.06%	10.85%	31,369
<b>Strongly Disagree</b>	72.45%	54.41%	42.42%	36.43%	33.24%	30.58%	141,421
<b>Total (N)</b>	68,008	64,803	44,803	41,621	34,916	36,346	290,497
<b>Frequency Missing = 3</b>							

Source: Adapted from Georgia Student Health Survey 2010-2011

Table 27 presents the age of onset of use of prescription drugs according to grade. Nearly 35 percent of 6<sup>th</sup> grade students who had used prescription drugs not prescribed to them reported their first use occurring at 8 years of age or younger. Among 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> graders, 30 to 70 percent reported their age at first use to be between 13 and 16 years of age, though age of first use was widely distributed across each grade level.

Table 27. Age at Onset of Use by Grade

“I started using prescription drugs not prescribed to me when I was...”

Table of Prescription Drug Initiation by Grade												
Grade	Prescription Initiation ( I started using prescription drugs not prescribed to me)											Total (N)
	8 or younger	9	10	11	12	13	14	15	16	17	18 or older	
6	34.84%	12.87%	16.81%	22.45%	7.48%	1.69%	0.40%	0.40%	0.24%	0.80%	2.01%	1,243
8	22.05%	4.98%	9.13%	9.50%	18.72%	22.60%	8.77%	1.87%	0.59%	0.37%	1.42%	2,190
9	17.35%	4.16%	6.66%	6.53%	10.60%	19.94%	23.79%	8.19%	1.49%	0.48%	0.79%	2,282
10	11.95%	1.85%	4.89%	3.24%	8.75%	13.02%	20.73%	28.15%	5.28%	1.43%	0.71%	3,087
11	11.86%	1.99%	4.25%	2.40%	6.51%	9.87%	14.95%	24.55%	18.38%	4.05%	1.20%	2,917
12	10.03%	1.25%	2.36%	1.94%	5.24%	7.86%	12.45%	17.32%	23.53%	14.04%	3.99%	3,511
<b>Total (N)</b>	2,379	523	919	874	1,389	1,937	2,253	2,426	1,575	684	271	15,230
<b>Frequency Missing = 275270</b>												

Source: Adapted from Georgia Student Health Survey 2010-2011

Table 28 presents the level of perceived harmfulness of taking prescription drugs among the various grades. The majority of students across all grades reported that they strongly agreed that taking prescription drugs not prescribed to them was harmful. However, a significant number of students across all grades reported somewhat or strongly disagreeing that that taking prescription drugs not prescribed to them was harmful.

Table 28. Perceived Harmfulness

“I think prescription drugs not prescribed to me are harmful”

Table of Prescription Harm by Grade							
Harm: “I think prescription drugs not prescribed to me are harmful.”	Grade						Total (N)
	6	8	9	10	11	12	
<b>Strongly Agree</b>	76.56%	76.01%	76.29%	73.91%	73.78%	74.01%	218,929
<b>Somewhat Agree</b>	6.41%	9.80%	11.02%	12.68%	12.66%	13.43%	30,228
<b>Somewhat Disagree</b>	2.37%	3.69%	4.23%	5.43%	5.49%	5.79%	12,178
<b>Strongly Disagree</b>	14.66%	10.50%	8.45%	7.98%	8.07%	6.77%	29,162
<b>Total (N)</b>	68,008	64,803	44,803	41,621	34,916	36,346	290,497
<b>Frequency Missing = 3</b>							

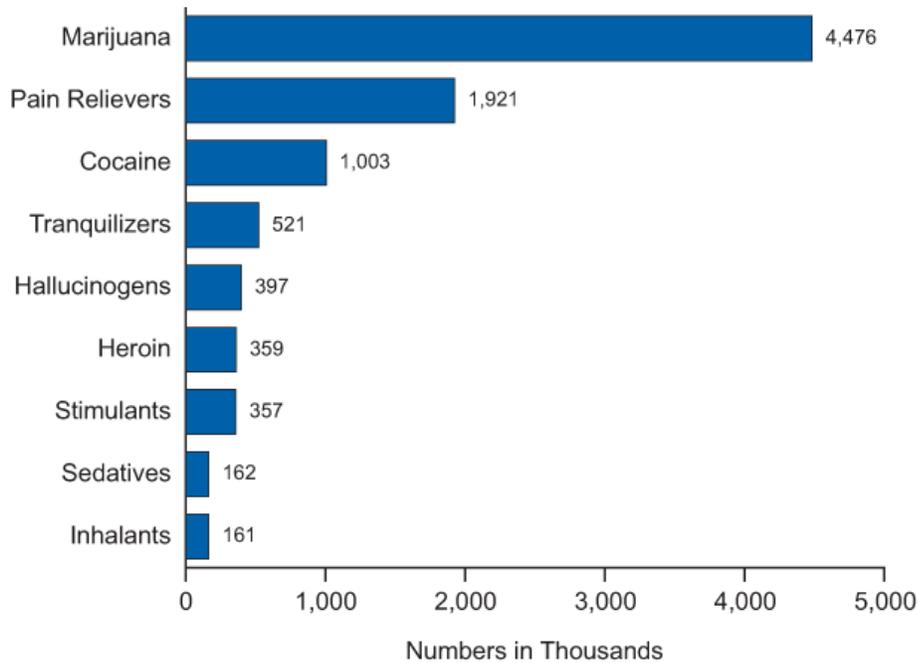
Source: Adapted from Georgia Student Health Survey 2010-2011

## PRESCRIPTION DRUG DEPENDENCE: U.S.

In addition to collecting information regarding the prevalence of substance use in the U.S., NSDUH also includes questions to assess the prevalence of substance dependence or abuse in the past 12 months. Because dependence involves the psychological and physiological effects of tolerance and withdrawal, it is considered to be a more severe substance use problem. For those individuals who meet the criteria for abuse and dependence, they are classified as having dependence but not abuse.

In 2010, the number of persons aged 12 or older who had dependence or abuse of pain relievers in the past year was 1,921,000, second only to marijuana (4,476,000).<sup>3</sup> Figure 23 presents illicit drug dependence or abuse in the past year among persons aged 12 and older by drug in 2010.

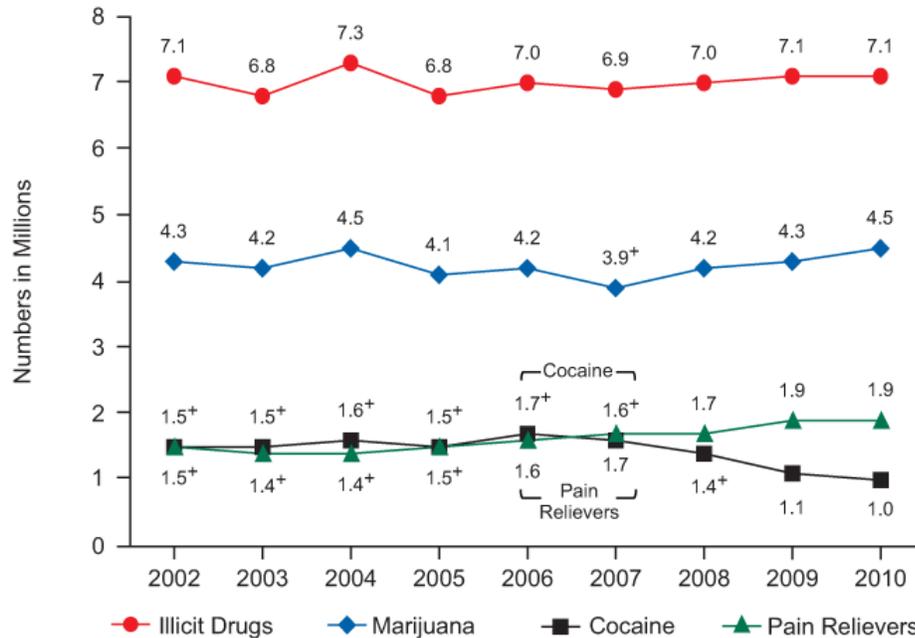
**Figure 23. Specific Illicit Drug Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2010**



Source: SAMSHA NSDUH 2011

While the number of persons who experienced pain reliever dependence or abuse increased between 2002 (1.5 million) and 2010 (1.9 million), the rate of persons who experienced pain reliever dependence or abuse remained unchanged between 2002 and 2010 and between 2009 and 2010. Figure 24 presents past year dependence or abuse among persons aged 12 or older by substance of abuse or dependence in 2010.<sup>3</sup>

**Figure 24. Illicit Drug Dependence or Abuse in the Past Year among Persons Aged 12 or Older: 2002-2010**



Source: SAMSHA NSDUH 2011

Of particular concern lately is the abuse of benzodiazepines, a class of central nervous system depressant drugs commonly prescribed for anxiety, insomnia and seizure disorders. According to a Treatment Episode Data Set (TEDS) report, the number of benzodiazepine treatment admissions almost tripled between 1998 to 2008, a significantly higher increase than the number of overall admissions during that same time period (11 percent).<sup>9</sup> The majority of those admitted for benzodiazepine admissions were white, non-Hispanic males between the ages of 18 and 34; however, compared with all admissions, benzodiazepine admissions were more likely to be female than male. Compared with all admissions, benzodiazepine admissions

were also more likely to have a psychiatric problem in addition to a substance abuse problem (43.4 vs. 24.9 percent).

Benzodiazepines are frequently abused in conjunction with other substances because they lengthen the high provided by the primary substance of abuse. Ninety-five percent of those admitted for benzodiazepine treatment reported using another substance in addition to benzodiazepines. In most cases (82.1 percent), benzodiazepine was the secondary substance of abuse, while 12.9 percent of admissions reported primary abuse of benzodiazepines; however, older benzodiazepine admissions were more likely to report benzodiazepines as their only substance of abuse.

Primary benzodiazepine admissions who reported use of other substances, most commonly reported secondary abuse of opiates (32.6 percent). Specifically, 8.4 percent reported heroin use and over one fourth (25.3 percent) reported abuse of opiates other than heroin, most commonly prescription pain relievers. Over twenty-seven percent (27.6) reported secondary abuse of alcohol, 22.6 percent reported using marijuana, 15.6 percent reported cocaine use, and nine percent reported other drugs. Among secondary benzodiazepine admissions, most reported primary use of opiates (54.2 percent), 29.8 percent reported heroin use, 24.4 percent reported primary abuse of opiates other than heroin, 24.7 percent reported primary abuse of alcohol, 11.4 percent reported primary abuse of marijuana, 6.3 percent reported primary abuse of cocaine, and 3.3 percent reported primary abuse of another drug.

## **PRESCRIPTION DRUG DEPENDENCE: GEORGIA**

### **Illicit Drugs**

In 2008-2009, 1.64 percent of Georgians aged 12 and older suffered from dependence on illicit drugs. This figure includes 2.03 percent of Georgians aged 12 to 17, 4.35 percent of Georgians aged 18 to 25, and 1.12 percent of Georgians aged 26 or older. An estimated 2.37 percent of Georgians aged 12 and older needed but did not receive treatment for illicit drug use. Almost four percent (3.60) of those aged 12 to 17 needed but did not receive treatment for illicit drug use, as did 6.48 percent of those aged 18 to 25 , and 1.5 percent of Georgians aged 26 and older.<sup>5</sup>

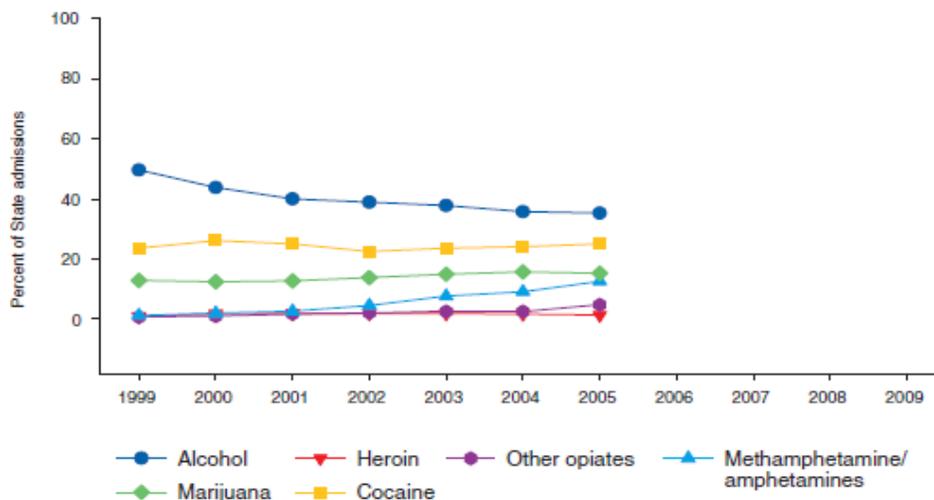
### **Opioids other than Heroin**

The Treatment Episode Data Set (TEDS) provides valuable information on the demographic and substance abuse characteristics of admissions to treatment of those aged 12 and older for abuse of alcohol and/or drugs, which is reported by individual states. TEDS only includes information about admissions to facilities that are licensed or certified by State substance abuse agencies and those that are tracked for other reasons. Generally, facilities that report TEDS data are those that receive State alcohol and/or drug agency funds including federal block grant funds. Because TEDS is an admission-based system, TEDS data do not represent individuals, rather they represent admissions to treatment. Therefore, one individual who presents for treatment twice within the same year would be counted as two admissions.

According to a recent TEDS report presenting data from 1999-2009, the treatment admission rate for opiates other than heroin has grown substantially and rates have increased every year from 1999 through 2009.<sup>10</sup> The treatment admission rate among persons aged 12 and older was 430 percent higher in 2009 (53 per 100,000) than in 1999 (10 per 100,000) and rates increased in each of the nine census divisions.

In Georgia, the most recent data reported to TEDS is for the year 2005. Georgia is one of only a few states that do not regularly report admissions data to TEDS. Georgia admissions for the treatment of opiates other than heroin among those aged 12 and older increased from 295 per 100,000 in 1999 to 599 per 100,000 in 2005. When adjusting for age, gender, and race/ethnicity, the increase between years remains approximately the same (204 per 100,000 in 1999 vs. 524 per 100,000 in 2005). Figure 25 depicts Georgia admissions for those aged 12 and older by primary substance of abuse for the years 1999 to 2005, after which Georgia discontinued reporting of admissions data.

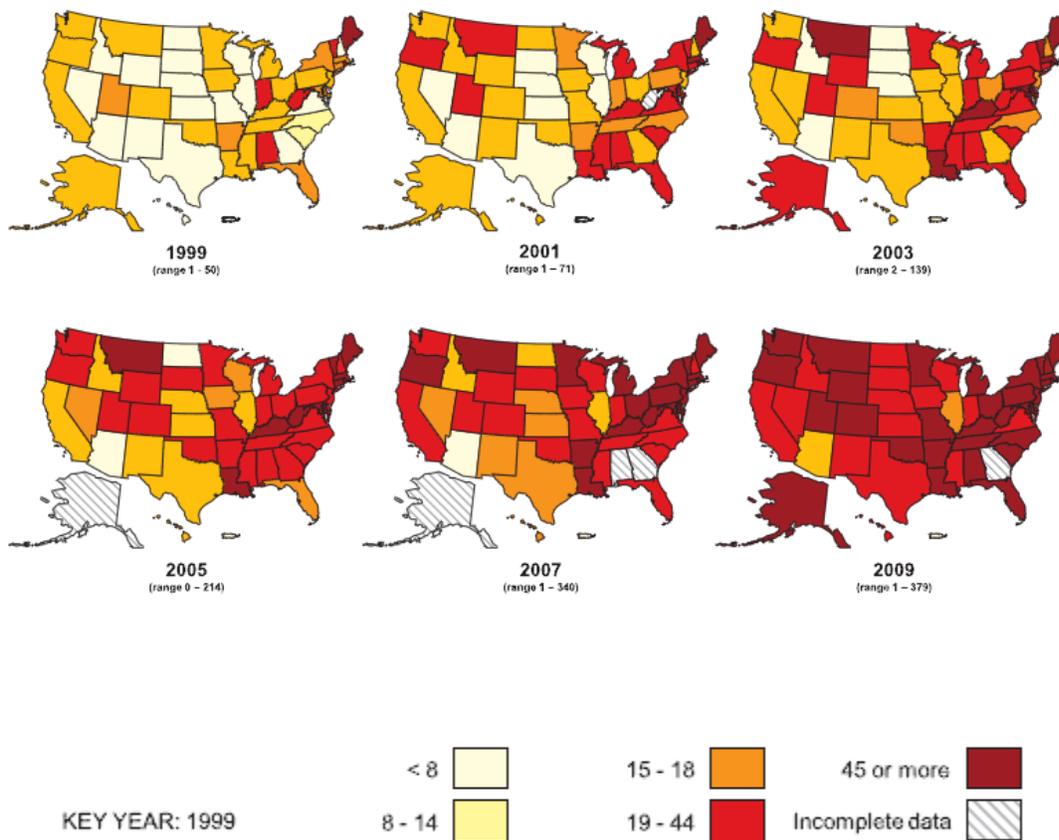
**Figure 25. Georgia Admissions Age 12 and Older by Primary Substance of Abuse: 1999-2009**



Source: Treatment Episode Data Set (TEDS) 1999-2009 State Admissions to Substance Abuse Treatment Services

Figure 26 depicts the increase in rates of primary non-heroin opiates by state for the years 1999-2009. As the maps depict, rates continued to increase from 1999 to 2005, the last year for which Georgia reported treatment admissions data.

**Figure 26. Primary non-heroin opiates/synthetics admission rates, by State or jurisdiction: 1999-2009**



Source: Treatment Episode Data Set (TEDS) 1999-2009 State Admissions to Substance Abuse Treatment Services

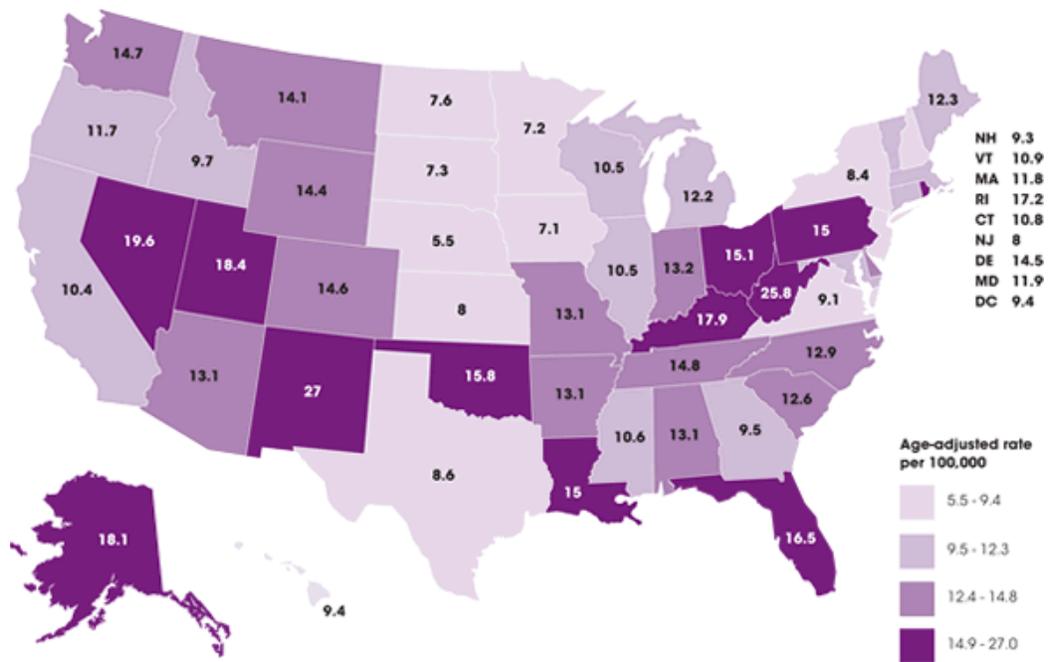
## **PRESCRIPTION DRUG OVERDOSES: U.S.**

Improper use of prescription drugs not only may lead to addiction, but is also responsible for an increasing number of emergency department visits and overdoses in the United States. Poisoning, the majority of which is caused by drugs (prescription and illicit), is now the leading cause of injury death in the U.S., surpassing automobile accident fatalities.<sup>11</sup> An estimated 100 people die from drug overdoses in the U.S. daily, and over 36,000 people died from drug overdoses in 2008, the majority of which were caused by prescription drugs.<sup>1,12</sup> Emergency department visits resulting from prescription opioid use increased by 111% between 2004 and 2008.<sup>1</sup> According to the CDC, the rates of drug overdoses have more than tripled since 1990. Prescription pain killers, also called opioid pain relievers, were involved in 14,800 overdose deaths in 2008, and caused three out of every four prescription drug overdoses. In 2009, the misuse of opioid pain relievers was responsible for 475,000 emergency visits. It is estimated that for every one death caused by prescription pain killers, there are 10 admissions for abuse, 32 emergency department visits for misuse and abuse, 130 people who abuse these drugs or who are dependent upon them and 825 people who are using painkillers non-medically.<sup>1,12</sup>

## **PRESCRIPTION DRUG OVERDOSES: GEORGIA**

According to the CDC, the age adjusted rate for overdose deaths per 100,000 persons in Georgia was 9.5 percent in 2008.<sup>12</sup> State age-adjusted rates vary widely; the lowest rate of prescription drug overdoses being 5.5 deaths per 100,000 and the highest rate being 27 deaths per 100,000. Figure 27 depicts the rates of drug overdose deaths among all the states in 2008.

**Figure 27. Drug Overdose Death Rates by State, 2008**



Source: Policy Impact: Prescription Painkiller Overdoses, CDC

According to a recent report from the Georgia Bureau of Investigation (GBI) Medical Examiner’s Office, deaths related to prescription drug overdoses continue to rise, accounting for 76% of the accidental drug deaths in the state.<sup>13</sup>

The GBI Medical Examiner’s Office, which performs autopsies in cases where drug overdose was the cause of death or a significant contributing factor in the death, found there was a 10% increase in the number of prescription drug overdose deaths in 2010 compared to 2009 in the 152 counties analyzed. The seven Georgia counties excluded from the report include the following: Fulton, Cobb, Gwinnett, DeKalb, Henry, Hall or Rockdale Counties. This is of significance given the urbanicity of these counties. Nationally, data has suggested that urban

and large metropolitan areas have higher rates of illicit drug use, so it is important to note that prescription overdose deaths in these counties are not accounted for by this report.

In 2010, 729 drug overdose deaths occurred in the 152 counties analyzed. The majority of these overdose deaths (560) involved only prescription drugs, while an additional 68 deaths were attributed to a combination of prescription and illicit drugs. These numbers represent an increase from 2009 in which 670 overdose deaths were identified and 508 deaths were attributed solely to prescription drugs. Table 29 depicts overdose deaths in Georgia for the years 2008-2010 by type of drug or combination of drugs.

Table 29. Overdose Deaths in Georgia 2008-2010 by Drug Type

<b>Deaths from:</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Rx Only	496	508	560
Illicit Drugs only	95	86	101
Combination Rx & Illicit	47	76	68
<b>Total Overdose Deaths</b>	<b>638</b>	<b>670</b>	<b>729</b>

Source: Georgia Bureau of Investigation

Overall, 86 different drugs were identified in the systems of the 729 persons who died from drug overdoses in 2010. On average, 2.5 drugs were involved in each overdose death. Table 30 depicts drugs found through toxicology tests in the highest numbers in overdose deaths in 2010.

Table 30. Top 10 Drugs Found in Toxicology Tests Involved in Drug Overdoses: 2010

Drug	Number
Alprazolam (For anxiety, Xanax)	231
Oxycodone (Narcotic Pain Reliever)	171
Methadone (Narcotic Pain Reliever)	151
Hydrocodone (Narcotic Pain Reliever)	145
Cocaine (Stimulant, Illicit)	96
Morphine (Narcotic Pain Reliever)	87
Fentanyl (Narcotic Pain Reliever)	78
Methamphetamine (Stimulant, Illicit)	65
Diazepam (For anxiety, Valium)	55
Diphenhydramine (Antihistamine, Benadryl)	55

Source: Georgia Bureau of Investigation

Table 31. Drug Deaths per Age Range: 2010

Age Range	Drug Deaths 2010
15 or younger	5
15 to 24	80
25 to 34	115
35 to 44	180
45 to 54	226
55 to 64	106
65 or older	17

Source: Adapted from the Georgia Bureau of Investigation

Table 32. Drug Deaths by Race: 2010

<b>Race</b>	<b>Drug Deaths</b>
White	658 (90.26%)
Black	64 (8.78%)
Hispanic	7 (0.96%)

Source: Adapted from the Georgia Bureau of Investigation

Table 33. Drug Deaths by Sex: 2010

<b>Sex</b>	<b>Drug Deaths</b>
Female	302 (41.3%)
Male	427 (58.57 %)

Source: Adapted from the Georgia Bureau of Investigation

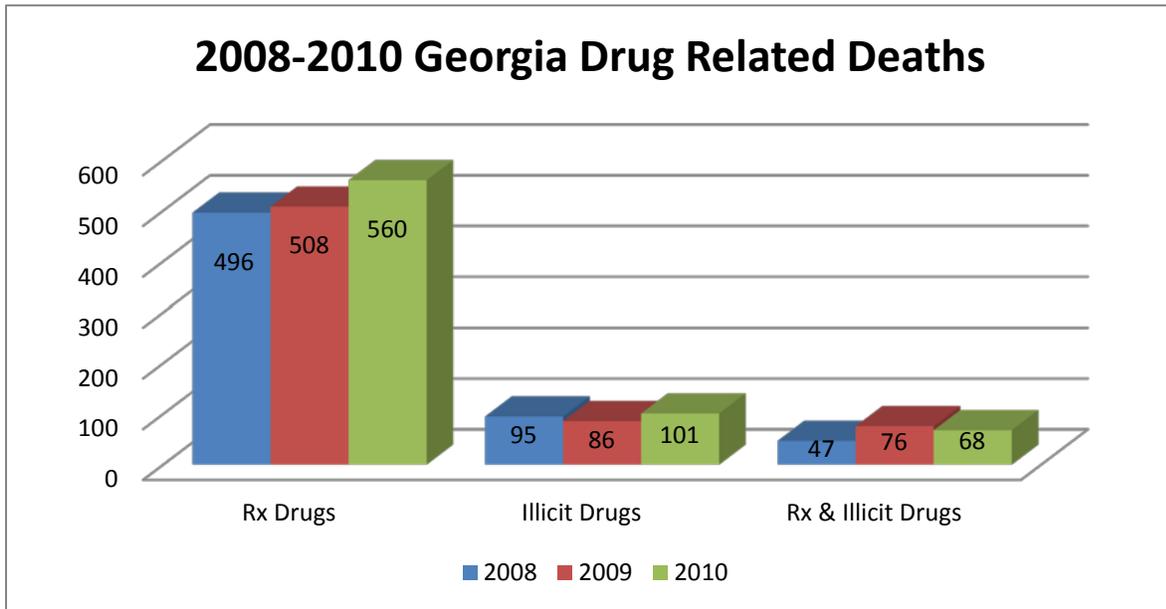
Table 34. Drug Deaths by Manner of Death

<b>Manner of Death</b>	<b>Number (%) of Drug Deaths</b>
Accidental	646 (88.61%)
Suicide	68 (9.33%)
Undetermined	15(2.06 %)

Source: Adapted from the Georgia Bureau of Investigation

Figure 28 depicts Georgia drug related deaths according to type of drug for the years 2008 through 2010. Prescription drugs account for the large majority of drug deaths during this time period and have increased each year since 2008.

**Figure 28: Georgia Drug Related Deaths 2008-2010**



Source: Adapted from Georgia Bureau of Investigation

## COMPARISON OF STATE AND NATIONAL RATES

Both national and statewide rates of nonmedical psychotherapeutic drug use have remained stable from 2002 to 2010.<sup>3,6</sup> During that same time period, national rates of psychotherapeutic drugs among the ages of 12-17 have declined (4.0 percent versus 3.0 percent), and remained stable in the ages group of 18-25 and 26 and over.<sup>3</sup> Similarly, statewide rates from 2002 to 2009 decreased in the 12-17-age range (8.41 versus 6.24), and remained stable among the 18-25 and 26 and over groups.<sup>6</sup> Both nationally and statewide, the 18 to 25 year age group reported the highest rates of nonmedical use of psychotherapeutics.<sup>6</sup>

Nationally, in 2010, among persons aged 12 and older, illicit drug use was highest among persons of two or more races (12.5 percent), American Indians (12.1 percent) and blacks

(10.7 percent). In 2010, the rate of illicit drug use among those 12 and older was lower among Asians (3.5 percent) and Native Hawaiians or Other Pacific Islanders (5.4 percent) than all other racial groups.

Overall, among those aged 12 and older, illicit drug use in Georgia was higher among blacks (17 percent), than whites (13.9 percent) or Hispanics (12.4 percent). Hispanics were significantly more likely to have abused pain relievers than blacks (7.9 percent vs. 3.5 percent respectively). Rates of illicit drug use in Georgia were higher than national rates among whites (13.9 versus 9.1 percent) and Hispanics (12.4 versus 8.1 percent).<sup>3,7</sup>

Among 12th graders nationally, however, African-Americans have consistently shown lower usage rates than Whites for most drugs, both licit and illicit. At the lower grade levels, where few have yet dropped out of school, African-American students also have lower usage rates for many drugs, though not all. Whites tend to have the highest rates of use of a number of drugs, including: marijuana, salvia, hallucinogens, LSD, hallucinogens other than LSD, narcotics other than heroin, OxyContin specifically, Vicodin specifically, amphetamines, Ritalin specifically, Adderall specifically, sedatives (barbiturates) and tranquilizers. Hispanics have tended to have the highest usage rate in 12th grade for a number of the most dangerous drugs, such as crack, crystal methamphetamine (ice), and heroin.

Rates of illicit drug use across employment status were significantly higher in Georgia than nationally. Although the rate of current illicit substance use was highest among the unemployed, both nationally and in Georgia, statewide percentages were nearly twice that of national rates (31.7 percent versus 17.5 percent).<sup>3,7</sup> Similarly, statewide rates among those

employed part-time were nearly double that of national rates (20.6 percent versus 11.2 percent). Rates of illicit drug use were lowest among those employed full-time, but the statewide rate (14.4 percent) again outranked the national rate (8.4 percent)<sup>3,7</sup> In 2009, the national rate of illicit drug dependence was significantly higher than statewide rate (2.8 versus 1.64 percent).<sup>6</sup>

Overdoses stemming from prescription drug abuse have increased both in Georgia and nationally in recent years. Nationally, emergency department visits resulting from opioid abuse increased by 111% between 2004 and 2008, and there was a 10% increase of prescription overdose deaths from 2009-2010 in Georgia (in the counties analyzed).<sup>1,13</sup> Prescription painkillers were involved in 14,800 deaths nationally in 2008, and 729 drug overdose deaths occurred in Georgia in 2010 (in the counties analyzed).<sup>11,13</sup>

## **OFFICE OF NATIONAL DRUG CONTROL POLICY: PRESCRIPTION DRUG ABUSE PREVENTION PLAN**

In order to respond to the epidemic of prescription drug abuse, the Office of National Drug Control Policy has developed a Prescription Drug Abuse Prevention Plan, which focuses on four primary areas: education, monitoring, proper disposal, and enforcement.<sup>14</sup> The plan calls for the education of both the general public and healthcare providers in order to inform them of the dangers of prescription drug abuse and how to properly dispense, store and dispose of prescription medications. Second, state adoption and implementation of prescription drug monitoring programs (PDMP) will aid in the identification of those who may be “doctor shopping” and diverting prescription medications and providers who may be unscrupulously

prescribing medications. The development of prescription drug disposal programs will serve to keep medications out of the water supply, and limit the availability of prescription drugs for unintended users.

## **NATIONAL PUBLIC EDUCATION EFFORTS**

Multiple federal agencies are involved in educating the public about prescription drug use and abuse including the Food and Drug Administration (FDA), Office of National Drug Control Policy (ONDCP), the Drug Enforcement Agency (DEA), the Substance Abuse and Mental Health Services Administration (SAMSHA), and the National Institutes of Health (NIH). Public education efforts seek to educate patients and the general public about appropriate use, secure storage, and disposal of prescription drugs in addition to the risks associated with misuse and abuse.

The FDA requires drug manufacturers to take measures to ensure the safety of their products, such as providing patient and prescriber education materials. Additionally, the FDA educates patients and providers about appropriate use and potential risks of drugs, including prescription pain relievers. The Health Resources and Services Administration (HRSA) operates the federal Poison Control Program, which in addition to providing treatment recommendations for poisoning, also has an education campaign aimed at educating the public on the risks of poisoning from prescription pain relievers. The National Institutes of Health, primarily through its component the National Institute on Drug Abuse, NIDA, provides strategic support for and conducts research on drug abuse and addiction and translates this research

into materials for public use. SAMHSA educates the public and prescribers about issues related to substance abuse in an effort to prevent abuse and reduce the prevalence of abuse.

The following section provides a description of federal prescription drug education initiatives organized by the federal agency that oversees them.

### **Drug Enforcement Agency (DEA)**

- **Just Think Twice:** A website directed specifically to teens containing information on a wide variety of substances, including prescription drugs<sup>15</sup>  
<http://www.justthinktwice.com/>
- **Get Smart About Drugs:** A website resource for parents to help them identify and prevent drug abuse among children and young adults. The website provides information about the abuse of prescription medications and other drugs and how parents can help keep their families safe. The website also provides stories from parents who have struggled with drug abuse among their children.<sup>16</sup>  
<http://www.getsmartaboutdrugs.com/default.html>
- **Take Back Initiatives:** While the primary purpose of the Take Back Initiative is to collect and dispose of unused prescription medications, the program also includes an education component about how to properly store and dispose of prescription drugs. Outreach materials include brochures, posters and billboards which are specific to prescription drugs.<sup>17</sup>  
[http://www.deadiversion.usdoj.gov/drug\\_disposal/index.html](http://www.deadiversion.usdoj.gov/drug_disposal/index.html)

- **Good Medicine, Bad Behavior: Drug Diversion in America** is a museum exhibit located in Washington, D.C. highlighting prescription drug misuse and abuse. The museum is an interactive exhibit that explores the history of prescription drug abuse and diversion in the United States and efforts to combat the problem over time. The exhibit emphasizes the therapeutic benefits of these medications when taken properly as well as the detrimental effects they can have when misused. There is also a resource area where visitors can read more about issues surrounding prescription drug abuse, interact with key anti-drug abuse websites, and take home literature with more information.<sup>18</sup>

<http://www.goodmedicinebadbehavior.org/>

#### **Food and Drug Administration (FDA)**

- **Opioid Public Service Announcements:** (audio, slides) Announcements include information about the proper use, storage and disposal of medications.

Source: GAO Prescription Pain Reliever Abuse<sup>19</sup>

#### **National Institutes of Health (NIH)**

- **Heads up: Real News About Drugs and Your Body:** This resource provides classroom materials—including lesson plans, student worksheets and magazine articles—related to drug abuse, including prescription drugs.

Source: GAO Prescription Pain Reliever Abuse<sup>20</sup>

- **National Institute on Drug Abuse (NIDA):** Disseminates drug related research and provides curriculum materials and free resources for teachers.<sup>20</sup>

<http://www.drugabuse.gov/>

- **NIDA for Teens:** A website designed to educate adolescents ages 11 through 15 (as well as their parents and teachers) on the science behind drug abuse. The site provides animated illustrations, quizzes, and games to clarify concepts, test the visitor's knowledge, and make learning fun through interaction. **PEERx** is a component of the NIDA for Teens website, which provides the facts about prescription drug abuse and the dangers associated with prescription drugs, a blog for teens, and related activities. Teens may also download stickers, posters and other materials related to prescription drugs.<sup>21</sup>

<http://teens.drugabuse.gov/about.php>

#### **Office of National Drug Control Policy (ONDCP)**

- **The National Youth Anti-Drug Media Campaign:** Contains two components aimed at preventing and reducing drug abuse, a teen-targeted Above the Influence (ATI) Campaign, and a young adult-targeted Anti-Meth Campaign. The ATI campaign provides broad prevention messaging at the national level – including television, print and Internet advertising. Additionally, the campaign has partnered with local, youth-serving organizations, such as Drug-Free Community grantees, Boys and Girls Clubs of America, SADD Chapters, Girl's Inc., Girl Scouts, Community Anti-Drug Coalitions of America (CADCA), the National Organization for Youth Safety (NOYS), ASPIRA, and Y's (formerly YMCAs), to implement on-the-ground ATI activities.<sup>22</sup>

Source: <http://www.whitehouse.gov/ondcp/anti-drug-media-campaign>

## Substance Abuse and Mental Health Services Administration (SAMSHA)

- **Not Worth the Risk; Even if it's Legal:** This campaign targets teens, college students and “student influencers” (e.g. parents, teachers, and health care providers). The Substance Abuse and Mental Health Services Administration (SAMSHA) has partnered with the National Council on Patient Information and Education (NCPIE) to develop a comprehensive range of educational and outreach messages encouraging parents to talk to their teens about preventing prescription medicine abuse. The NCPIE produces and distributes educational materials in English and Spanish to television stations, newspapers, and radio stations across the U.S.<sup>23</sup>

[http://www.talkaboutrx.org/not\\_worth\\_the\\_risk.jsp](http://www.talkaboutrx.org/not_worth_the_risk.jsp)

The Government Accountability Office (GAO)<sup>19</sup> has identified the following key practices for developing public education efforts:

- Define goals and objectives
- Analyze the situation
- Identify stakeholders
- Identify resources
- Research target audiences
- Develop consistent, clear messages
- Identify credible messengers
- Design media mix
- Establish process metrics to measure success
- Establish outcome metrics to measure success

According to a recent GAO report, *Prescription Pain Reliever Abuse*, all federal agencies involved with public education have established metrics to monitor the implementation and

functional elements of their educational activities. These process metrics monitor the operational elements of educational efforts such as the volume or quantity of the efforts. However, only two agencies, ONDCP and NIH, have established or plan to establish outcome metrics which would assess the impact of their educational efforts on their respective audiences' knowledge, attitudes and behavior. For example, the ONDCP measures outcomes of the National Youth Anti-Drug Media Campaign through ongoing studies which survey teens about their awareness of the media campaign as well as their attitudes, beliefs, and intentions regarding drug use, use of the campaign's website and teens' attitudes after using the website. The GAO emphasizes that both sets of metrics are critical to program development. Table 13 depicts the various federal public education efforts as they relate to key practices.

Table 35. Agencies' Use of Key Practices for Developing Public Education Efforts

Agency	Education effort	Define goals and objectives	Analyze the situation	Identify stakeholders	Identify resources	Research target audiences	Develop consistent, clear messages	Identify credible messenger(s)	Design media mix	Process metrics	Outcome metrics	Establish metrics to measure success
DEA	Just Think Twice <sup>a</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Get Smart About Drugs <sup>a</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Take Back Initiative <sup>b</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Good Medicine, Bad Behavior	✓	✓	✓	✓	✓	✓	✓	✓	✓		
FDA	Opioid Public Service Announcements	✓	✓		✓		✓	✓	✓	✓		
NIH	Heads Up: Real News About Drugs and Your Body <sup>a</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	NIDA for Teens <sup>a</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ONDCP	National Youth Anti-Drug Media Campaign <sup>a</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
SAMHSA	Not Worth The Risk; Even if it's Legal	✓	✓	✓	✓	✓	✓	✓	✓	✓		

Source: GAO analysis of information from DEA, FDA, NIH, ONDCP, and SAMHSA.

Through interviews with key stakeholders in federal agencies, key challenges have been identified for developing effective educational efforts for prescription drug use. Because there are legitimate reasons for use of prescription drugs, education efforts need to be more nuanced than those targeting other drugs. Education efforts must also be conducted in such a way so as not to alert people to the possibility of using prescription drugs to get high. Importantly, the motivations for misusing and abusing prescription drugs, such as self-medicating for pain relief, are different than those for using other illicit drugs; therefore, it is important to effectively target a variety of audiences and reasons for prescription drug use.<sup>19</sup>

Additional national education efforts include the following:

- **The American Medicine Chest Campaign (AMCC)**—also included in the Prescription Drug Disposal section of this report—is a community-based public health initiative with law enforcement partnership, designed to raise awareness about the dangers of prescription drug abuse. It sponsors a yearly nationwide prescription drug drop-off program and challenges Americans to take the 5 step American Medicine Chest Challenge, which includes the following: 1) Take inventory of your prescription and over-the-counter medicine 2) Secure your medicine chest 3) Dispose of your unused, unwanted, and expired medicine in your home or at an American Medicine Chest Challenge Disposal site 4) Take your medicine(s) exactly as prescribed and 5) Talk to your children about the dangers of prescription drug abuse.<sup>24</sup>

[www.americanmedicinechest.com](http://www.americanmedicinechest.com)

- **Red Ribbon Week Campaign** is a national campaign that brings awareness to the efforts to prevent substance abuse and live a drug-free lifestyle. It is a general substance abuse prevention campaign, not specifically geared towards prescription drugs.<sup>25</sup>  
<http://www.imdrugfree.com/>
- **The Drug Take Back Network**, as described in the Prescription Drug Disposal section, is a website designed by the Product Stewardship Institute to be an accessible online resource for take back programs. This site maintains a list of recurring take back events, organized by state and provides educational information about how to initiate take back programs in local communities, and resources on prescription drug take back research, legislation and addiction issues.<sup>17</sup>  
[www.takebacknetwork.com/index.html](http://www.takebacknetwork.com/index.html)

## GEORGIA PUBLIC EDUCATION EFFORTS

The Drug Free Communities Support Program (DFC) is a Federal grant program offered through the ONDCP and SAMSHA that provides funding to community-based coalitions that organize to prevent youth substance use, allowing local coalitions to address local alcohol and drug use issues. Since the program's inception, the DFC has funded nearly 2,000 coalitions and currently mobilizes nearly 9,000 community volunteers nationally. According to the ONDCP, the program has been successful in significantly reducing youth alcohol, tobacco and marijuana use.

Researchers at Georgia State University (GSU) obtained a copy of 2011 Drug-Free Community Coalition Grantees for FY2011, which includes nine grantees in Georgia (Appendix A). Additional coalitions were identified via a web search and from a list provided by The

Council on Alcohol and Drugs (TCAD). Researchers reached out to a total of 19 coalitions in Georgia to ask about their efforts in addressing prescription drug misuse and abuse in their communities. Table 36 details the results of these inquiries.

Table 36. Georgia Coalitions and their Efforts to Address Prescription Drug Abuse

Drug-Free Coalition Name	Address/Phone Number	Contact	Report
Augusta-Richmond Community Partnership	353 Telfair St. Augusta, GA 30901 706-721-1048	Monica Baldwin, Consumer Relations Coordinator	<ul style="list-style-type: none"> <li>no current activities for prescription drugs</li> </ul>
Berrien County Collaborative, Inc.	909 N. Davis St. Nashville, GA 31639 229-686-6576	Kathy Spells, Registrar	<ul style="list-style-type: none"> <li>no current activities for prescription drugs</li> </ul>
Bibb County/Drug Free Macon	195 Holt Avenue Macon, GA 31201 478-742-6677	Shawna Bester, Program Manager	<ul style="list-style-type: none"> <li>no current activities but they have discussed prescription drugs and plan to implement activities in the future</li> </ul>
Bulloch County Board of Education *	Sparks, GA 912-764-6179	Catherine Hendrix	<ul style="list-style-type: none"> <li>no response</li> </ul>
Bryan County MAGF TAI Local Drug Free Coalition *	Richmond Hill, GA 912-653-5258	Kay Hughes, Grant Administrator	<ul style="list-style-type: none"> <li>distribute literature from SAMSHA, CADCA and website stopmedicineabuse.com.</li> <li>partnered with pharmacies to provide literature about Rx drug abuse and proper medication storage</li> <li>deliver Project Alert, an eleven week program, to 8<sup>th</sup> graders educating them about the dangers of Rx drugs and cough medicine</li> <li>educate parents of students in all nine schools in the county, also meet with Chamber of Commerce, Rotary Clubs, Garden Clubs, and senior centers.</li> <li>have partnered with the United Way to provide information to shut-ins and elderly. Information is also provided at United Way clothing store.</li> <li>purchase 100-150 lock boxes per year for community distribution. Police and pharmacists sometimes refer people who have had medication stolen so they can receive a free lock box.</li> <li>participate in take-back days</li> </ul>

Camden Substance Abuse Prevention Coalition	P.O. Box 5087 St. Mary's, GA 31558 912-882-7295	Shantay Gibbs, Project Coordinator	<ul style="list-style-type: none"> <li>• have partnered with the local sheriff's office to participate in the American Medicine Chest Challenge prescription drug disposal program for the past 2 years.</li> </ul>
Cobb Community Collaborative	770-528-4610		<ul style="list-style-type: none"> <li>• no response</li> </ul>
Cook County Drug Free Communities *	Sparks, GA 229-549-7976	Jennifer Lovette	<ul style="list-style-type: none"> <li>• collaborate with GBI.</li> <li>• conduct community assessments to identify local issues</li> <li>• aware that prescription drug use is an issue in the community, and law enforcement has been putting pressure on drug houses selling prescription drugs.</li> <li>• participate in yearly take-back programs, distribute information to the community via presentations at collaborative meetings open to the public</li> <li>• She was unsure if they had any written educational materials regarding prescription drugs.</li> <li>• She stated they also are seeing a lot of K2 and Spice use (made from OTC drugs) in the community.</li> </ul>
Community Values Inc./Mitchell County Children and Youth Collaborative	51 Hilliard Street Camilla, GA 31730 229-336-8243	Mike Tabb, Director	<ul style="list-style-type: none"> <li>• They are no longer a drug-free coalition sponsored by SAMSHA.</li> <li>• They have never and are not currently engaged in activities related to prescription drugs.</li> <li>• Mr. Tabb stated that he does not believe prescription drug use is a significant issue in his community. Addressing use of methamphetamine and cocaine has been their primary focus.</li> </ul>
Drug-Free Forsyth Coalition/ Georgia Marshall Arts Foundation	Cumming, GA * 770-205-4300	Jessica Regus	<ul style="list-style-type: none"> <li>• no response</li> </ul>
Genesis Prevention Coalition, Inc./Operation RID	659 Auburn Avenue, NE Suite 250251 Atlanta, GA 30312 404-522-9690	Geri Curry, Program Coordinator	<ul style="list-style-type: none"> <li>• no current activities for prescription drugs</li> </ul>

<p>Georgia Council on Substance Abuse/Oconee Area Resource Council</p>	<p>1551 Jennings Mill Rd. Suite 2700 B Bogart, GA 30622 404-523-3440</p>	<p>Owen Daugherty</p>	<ul style="list-style-type: none"> <li>• no current activities for prescription drugs</li> </ul>
<p>Gwinnett Coalition for Health and Human Services*</p>	<p>Lawrenceville, GA 678-376-7887</p>	<p>Ellen Gerstein, Director</p>	<ul style="list-style-type: none"> <li>• participate in take-back days</li> <li>• collaborate with Emory East-Side Hospital and Gwinnett Hospital</li> <li>• provided education to Emory East Side and Gwinnett about drug and alcohol use data captured by GSHS.</li> <li>• Gwinnett County also adds addendum of questions to GSHS regarding prescription drugs and other behaviors. Their data indicate that prescription drugs are not drugs of choice among their youth, so they have focused more on tobacco and alcohol.</li> <li>• The hospitals now participate in the drug take back days as part of Gwinnett Great Days of Service.</li> <li>• Representatives from the GBI, police department, and hospitals have formed a Health and Wellbeing Committee.</li> <li>• The Seniors Taskforce Initiative focuses on locking up and disposing of prescription drugs.</li> <li>• Gwinnett United Drug Education distributes a flier that focuses on prescription drugs, Inspire to Make Healthy Choices, to 3,000 people through parks, neighborhood groups, business offices, and bathroom stalls.</li> <li>• They will be focusing more on prescription drugs during next strategic plan.</li> </ul>
<p>Drug Free Coalition of Hall County (a.k.a. Face It People)* MAGF TAI Local Coalition</p>	<p>Gainesville, GA 770-534-1080 x 277</p>		<ul style="list-style-type: none"> <li>• kicked off prescription drug initiative by providing community presentation with 200 attendees at local hospital</li> <li>• provided continuing medical education presentation entitled “protect your practice”, attended by 70 physicians and allied health professionals. As a result of this presentation, nine local physicians have formed an advisory group to discuss strategies to prevent abuse and diversion of prescription drugs.</li> <li>• has partnered with four local law enforcement agencies to participate in the next take-back day. They are awaiting responses from two additional law enforcement agencies regarding their participation.</li> <li>• During the last take back day in October 2011, 44lbs of prescription drugs were collected.</li> </ul>

			<ul style="list-style-type: none"> <li>• Video contest: currently facilitating a video contest among Hall county Middle and High school students about substance abuse prevention. Sixteen videos have been submitted and will be voted on by the community. The videos will be posted on Facebook and Youtube. Links to the videos will be made available on the coalition's website faceitpeople.org. Contest winners will be awarded prizes.</li> <li>• has partnered with Northeast Georgia Medical Center Emergency Services Department to hang posters and distribute postcards to ED patients. Posters and postcards contain the MAG and coalition logo and provide information on proper use, storage and disposal of prescription drugs. Approximately, 2,000 people are served through the NE GA Medical Center Emergency Services Department every month.</li> <li>• The postcards are also being provided electronically to local physicians' offices, so they may be printed and provided to patients. Information about the postcards is being made available through multiple channels including Hall County Medical Association, local hospitals and through press releases.</li> <li>• An article about the coalition's activities was recently published in the local Gainesville Times newspaper.</li> </ul>
H.E.A.R.T. Coalition, Inc.*	Atlanta, GA 404-755-8788	Tamika Moon, Tobacco Initiative Project Coordinator	<ul style="list-style-type: none"> <li>• no current activities for prescription drugs</li> </ul>
South Georgia Regional Prevention Coalition Dodge County Board of Education	Dodge/Lyons Counties (229) 567-3413	Lisa Kingry, Director	<ul style="list-style-type: none"> <li>• no current activities for prescription drugs</li> </ul>
Toombs County Board of Commissioners *	Lyons, GA 912-557-6026	Barbara Poplin, Family Connections Director	<ul style="list-style-type: none"> <li>• participate in drop-off program, Operation Pill Drop. Youth leadership group from the high school help to facilitate and hand out educational materials</li> <li>• will soon be hanging a billboard depicting child taking medicine from medicine cabinet of grandparent</li> </ul>

Troupe County Prevention Coalition/ Troup Family Connection Authority *	LaGrange, Georgia 706-298-5053/7230	Jamie Seagraves, Project Coordinator	<ul style="list-style-type: none"> <li>• have participated in the prescription drug drop-off program in conjunction with local law enforcement for the past 2 years and have 4 drop off locations.</li> <li>• host an annual town hall meeting with a different topic each year. In 2011, the town hall meeting focused on prescription drugs.</li> </ul>
Union County Anti-Drug Coalition	76 Hunt - Martin St. Suite 134 Box 5 Blairsville, Georgia 30512 706-439-6058		<ul style="list-style-type: none"> <li>• provides information, education and support services to children, teens and adults in the community towards prevention of use of illegal drugs and the illegal use of prescription drugs.</li> <li>• Unable to contact via phone. Information was garnered from their website.</li> </ul> <p><a href="http://www.drugfreeunioncounty.org/index.html">http://www.drugfreeunioncounty.org/index.html</a></p>

\* 2011 SAMSHA funded Drug-Free Coalitions

The “Think About It” Campaign is an initiative of the Medical Association of Georgia Foundation (MAGF). In order to accomplish its objectives of developing a comprehensive drug policy for Georgia, educating physicians, other healthcare professionals and the public, and promoting proper medication storage and disposal, MAGF has partnered with the Governor’s Office, the Lieutenant Governor’s Office, the State Attorney General, the Composite State Board of Medical Examiners, the GBI, the University of Georgia, The Council on Alcohol and Drugs (TCAD) and NIDA. The Drug-Free Coalition for Hall County is the lead agency for the first “Think About It” Local Coalition (TAILC). The Drug-Free Coalition of Bryan County is the lead agency for the second TAILC. By the end of the campaign, MAGF plans to have established 50 TAILCs throughout Georgia.<sup>26</sup> While activities already underway are listed in the table above, the overall goals of the “Think About It” Campaign are listed below:

Goal One: Education

- Educate Georgians about the dangers of prescription drug misuse and abuse, with special focus on parents, youth K -college, senior citizens, the business community, and

patients with acute and chronic conditions for which treatment with controlled substances are indicated.

- Educate physicians and other healthcare professionals on best practices for prescribing and managing opioids for the treatment of pain while minimizing the risk of substance misuse, abuse and addiction.
- Increase the number of prescribers and dispensers who provide patient education on appropriate, safe use and proper storage and disposal of prescription drugs, especially controlled substances.

#### Goal Two: Comprehensive Drug Policy for Georgia

- Improve Georgia's ability to prevent and detect prescription drug misuse and diversion while supporting access to legitimate medical use of controlled substances through a statewide prescription drug monitoring program (PDMP) that serves as a database of all transactions for controlled substances dispensed in the state.
- Establish a data sharing system wherein Georgia can share data with authorized healthcare professionals in other states.
- Have safe storage devices in all housing units
- Conduct drug take back events occurring on a continuous basis through community-based programs.
- Have the judicial system designed to achieve a reduction in recidivism and substance abuse among nonviolent, substance abusing citizens.

- Make prescription drug addiction treatment and recovery options in Georgia available to all citizens across the life span.

### Goal Three: Proper Medication Storage and Disposal

- Promote various means to secure drugs in the home.
- Promote convenient, environmentally responsible model prescription drug disposal programs in Georgia.<sup>26</sup>

Also acknowledging the issue of prescription drug abuse in the state is Narconon of Georgia, which has recently initiated the *Prescription Drug Abuse Reduction Campaign*. Narconon educates families about how to identify the signs of drug abuse as well as about taking measures such as locking medicine cabinets to prevent abuse. The organization has been active in providing educational materials about prescription drugs to chiropractic and lawyers' offices, local jails, and drug courts. Additionally, the organization provides education through an eleven week program about the dangers of drug use, including prescription drugs, to metro Atlanta middle and high schools.<sup>27,28</sup>

## **NATIONAL EDUCATION EFFORTS FOR HEALTHCARE PROVIDERS**

Healthcare professionals, including physicians, physicians assistants, nurse practitioners, pharmacists, nurses, psychologists, and dentists, play a key role in reducing prescription drug misuse and abuse. Balancing effective pain control treatment with the recognition, management, and prevention of problems associated with opioid abuse is a tremendous challenge, yet most healthcare professionals receive little training on the importance of

appropriate prescribing and dispensing methods.<sup>14</sup> To date, most substance abuse educational interventions and research have focused on tobacco and alcohol abuse, leaving insufficient emphasis placed on training healthcare professionals in managing prescription drug abuse.<sup>14</sup> Additionally, outside of addiction treatment centers, the majority of schools for health professions do not provide in-depth training on the recognition and treatment of substance abuse. Education is often limited, inconsistent, and fragmented, which results in numerous barriers to adequate care for substance abuse patients, as well as a system in which prescription drug abuse thrives.<sup>19</sup> The ONDCP has identified the systematic training of healthcare workers to effectively assess and manage substance use disorders as a central approach in reducing prescription drug abuse.<sup>14</sup>

Integrating alcohol and other drug screening into medical settings is a priority of the U.S. National Drug Control Strategy, yet training varies widely among medical residency programs. The overall emphasis on substance abuse recognition and treatment and proper prescribing practices among various levels of medical curricula remains disproportionately low compared with other chronic medical conditions.<sup>29</sup> A national survey of medical residency programs found that only half of programs had a required substance use curriculum, and the median number of curricular hours ranged from 3 (emergency medicine and OB/GYN) to 12 (family medicine).<sup>30</sup>

A 2008 follow-up survey found that efforts made to improve substance abuse education within medical school curricula had not been uniformly applied in all residency programs.<sup>14</sup> Additionally, prescribers who completed medical training in prior years may not have been trained in prescribing pain relievers recently released to the U.S. market, such as extended-release or long-lasting opioids.<sup>19</sup> While continuing education could help address this issue,

currently only nine states have a continuing medical education (CME) requirement related to education on controlled substance prescribing or pain management for certain prescribers.<sup>19</sup>

Multiple federal agencies play a role in preventing the abuse and misuse of prescription pain relievers. The FDA, NIH, and SAMHSA are using a variety of strategies to mandate and implement prescriber education related to treating pain, prescribing opioids appropriately, and identifying substance abuse. Strategies pursued on a federal level in recent years include developing CME programs, requiring training and certification in order to prescribe certain opioids, organizing physician mentoring networks and developing curricula resources for future prescribers.

The FDA, NIH, and SAMHSA have all developed CME programs in order to educate prescribers about issues related to prescription pain reliever abuse and misuse. These voluntary programs aim to develop and maintain the knowledge, skills, professional performance and relationships physicians use to provide services to patients.

In 2011, the FDA released the Risk Evaluation and Mitigation Strategy (REMS), which is an education program for prescribers (e.g., physicians, nurse practitioners, physician assistants) and patients. The REMS program focuses on drugs or biologics that have a known or potential safety risk. REMS may be required from the manufacturer prior to approval of a drug or post-approval if new safety information becomes available, or if it is determined that REMS is necessary to ensure that drug benefits outweigh risks. REMS can be mandated for any medication or class of medication and may include medication guides and patient package inserts, communications to healthcare providers, information for patients and implementation systems to assure safe use.

The goal of opioid REMS is to ensure balance between appropriate access to opioid therapy and risk mitigation. The Risk Evaluation and Mitigation Strategy requires manufacturers of long-acting and extended-release opioids to develop information that prescribers can use when counseling patients about the risks and benefits of opioid use.<sup>31</sup> Additionally, prescribers are trained to recognize evidence of and potential for opioid misuse, abuse and addiction. Under REMS, drug manufacturers develop educational programs for prescribers and patients, and provide the educational materials either directly or through accredited CME providers.<sup>19</sup> The NIH uses a live theater CME format to educate prescribers at medical conferences across the country about identification of substance abuse. The National Institutes of Health employs a dramatic reading of a portion of a play that focuses on a character's morphine addiction, an expert panel reaction, and a facilitated audience discussion to emphasize the importance of screening, intervention and referral to treatment into primary care settings.<sup>19</sup>

Another strategy the FDA uses to control prescription drug abuse is requiring prescribers of certain prescription opioids to be trained and certified in order to prescribe them. In order to become certified to prescribe these drugs for outpatient use, prescribers must review written materials, successfully complete a knowledge assessment, and register with the manufacturer of the drug by completing a prescriber enrollment form, which includes a commitment to complete a patient-prescriber agreement with each new patient. Prescribers are required to become recertified every two years.<sup>19</sup>

A third strategy the NIH and SAMHSA are pursuing is the development of physician clinical support systems. The support systems provide educational resources and free, nationwide mentoring services related to prescribing prescription opioids. Two physician

clinical support systems have been funded to date: one to assist physicians in implementing substance abuse screening in their practices and one focused on educating healthcare professionals on appropriate opioid prescribing practices for patients with chronic pain.<sup>19</sup>

The final strategy NIH and SAMHSA are using is developing a curriculum for future prescribers focused on issues related to prescription drug abuse. The National Institute on Drug Abuse (NIDA) Centers of Excellence for Physician Information are expanding current curriculum resources in order to train medical professionals to appropriately screen, treat, and refer patients with substance use disorders. Currently, five curriculum resources specific to prescription drug abuse and misuse have been developed. In addition, NIDA is working to establish the NIH Pain Consortium Centers of Excellence in Pain Education, whose aim is to develop curricula that will educate medical students about best practices in the treatment of pain. The National Institute on Drug Abuse's goal is to complete and integrate the curriculum by 2014. The Substance Abuse and Mental Health Services Administration (SAMHSA) is also facilitating the development of a curriculum for training medical residents.<sup>19</sup> Through the Screening, Brief Intervention, Referral and Treatment Medical Residency Program (SBIRT), residency programs are developing and implementing a curriculum and clinical training for identifying substance use disorders. The program, currently implemented in 16 residency programs, targets physicians, dentists, and other prescribers and is designed to be transferable to medical schools and residency programs nationwide.<sup>32</sup>

Additionally, the ONDCP recommends implementing the following action items, some of which federal agencies have already begun to put into operation, in order to improve

educational efforts and to increase research and development in order to stem the growth of prescription drug use: <sup>14</sup>

- Work with Congress to amend Federal law to require practitioners (such as physicians, dentists, and others authorized to prescribe) who request DEA registration to prescribe controlled substances to be trained on responsible opioid prescribing practices as a precondition of registration. This training would include assessing and addressing signs of abuse and/or dependence, and recertification would be required every two years.
- Require drug manufacturers, through the Opioid Risk Evaluation and Mitigation Strategy (REMS), to develop effective educational materials and initiatives to train practitioners on the appropriate use of opioid pain relievers
- Federal agencies that support their own healthcare systems will increase continuing education for their practitioners and other healthcare providers on proper prescribing and disposal of prescription drugs.
- Work with appropriate medical and healthcare boards to encourage them to require education curricula in health professional schools (medical, nursing, pharmacy, and dental) and continuing education programs to include instruction on the safe and appropriate use of opioids to treat pain while minimizing the risk of addiction and substance abuse. Additionally, work with relevant medical, nursing, dental, and pharmacy student groups to help disseminate educational materials, and establish student programs that can give community educational presentations

- In consultation with medical specialty organizations, develop methods of assessing the adequacy and effectiveness of pain treatment in patients and in patient populations to better inform the appropriate use of opioid pain medications.
- Work with the American College of Emergency Physicians to develop evidence-based clinical guidelines that establish best practices for opioid prescribing in the Emergency Department.
- Work with all stakeholders to develop tools to facilitate appropriate opioid prescribing, including development of Patient-Provider Agreements and guidelines.

Despite various ongoing strategies to educate current and future prescribers about issues related to prescription pain reliever abuse and misuse, more education is necessary. The majority of educational strategies being pursued by federal agencies are voluntary, and may not reach the majority of current or future prescribers. The ONDCP, DEA, FDA, and SAMHSA are currently working to develop a legislative proposal that will require all prescribers who request DEA registration in order to prescribe controlled substances to be trained on the appropriate and safe use, proper storage, and disposal of prescription pain relievers as a precondition of registration, which will ensure that all prescribers have an analogous baseline of knowledge.

## **GEORGIA EDUCATION EFFORTS FOR HEALTHCARE PROVIDERS**

As mentioned in a previous section of this report, *Georgia Public Education Efforts*, the Medical Association of Georgia Foundation (MAGF) has launched the *Think About It* Campaign (*TAI*) in order to combat prescription drug abuse in Georgia. The *TAI* campaign, initiated in 2011, was established in response to the continuing rise in prescription drug abuse and

addiction rates both nationally and in Georgia. Georgia ranks third in the nation for the number of pain killers sold, and the majority of drug overdoses in the state last year stemmed from prescription medications. The education component of the *TAI* campaign, spearheaded by MAGF, provides education to physicians, pharmacists and other healthcare workers. The campaign addresses multiple areas contributing to prescription drug abuse through the following goals and activities:

1. Develop and present Continuing Medical Education (CME) programs for physicians throughout Georgia to educate them regarding the problems with prescription drug misuse, abuse and addiction and how to implement “best practices” to deter the problem
2. Develop and present CME for physicians on the new pain management rules recently promulgated by the Composite State Board with guidelines for how to successfully implement them into practice
3. Once implemented, develop and present CME for physicians on how to incorporate Georgia’s new PDMP into daily practice
4. Develop a physician tool kit to assist physicians in providing information to their patients on the dangers of misuse, abuse and addiction of prescriptions drugs and the safe storage and safe disposal of their medications
5. Develop promotional material for physicians to use in their practices to inform patients about and encourage their patients to utilize upcoming DEA drug take back events<sup>26</sup>

The Medical Association of Georgia Foundation will partner with Georgia Poison Control, the Georgia Medical Group Managers Association, the Georgia Nurse Practitioners Association, the Georgia Physician's Assistant Association, the Georgia Nursing Home Association, the Coroners Association, as well as hospice centers, therapists, hospitals, home health care programs, drug abuse centers, and drug coalitions. In addition, MAGF plans to partner with the following specialty associations:

- Georgia Chapter, American Academy of Pediatrics (GAAP)
- Georgia Academy of Family Physicians (GAFP)
- Georgia Obstetrical and Gynecological Society (GAOBGYN)
- Georgia College of Emergency Physicians (GCEP)
- Georgia Society of the American College of Surgeons (GACS)
- Georgia Orthopedic Society (GOS)
- Georgia Chapter of American College of Physicians (GAACP)
- Georgia Dental Association
- Georgia Neurosurgical Society (GNS)
- Georgia Society of Ophthalmology (GSO)
- Georgia Urological Association (GUA)
- Georgia Psychiatric Physicians Association (GPPA)
- Georgia Society of Interventional Pain Physicians

## Medical School Curriculum

Another important strategy for stemming the growth of prescription drug abuse is the implementation of prescription drug curricula in medical schools in order to train future healthcare professionals in appropriate prescribing methods and the recognition and treatment of drug abuse. Georgia is home to five medical schools: Emory University School of Medicine, Medical College of Georgia School of Medicine, Mercer University School of Medicine, Morehouse School of Medicine, and Philadelphia College of Osteopathic Medicine- Georgia Campus.

Although there is no federal- or state-mandated curriculum for prescription drug abuse recognition and treatment, at least two of Georgia's medical schools have opted to include training on this subject. The Medical College of Georgia's second year curriculum contains lectures on prescription drug abuse as part of pharmacology. They offer 6 credit hours of lecture, which includes information on other drugs that are commonly abused.<sup>33</sup> Additionally, prescription drug abuse is discussed in the context of patient care. Mercer School of Medicine examines prescription drug addiction during the "Brain and Behavior" phase taken in the first year of classes. Prescription drug abuse is also discussed in the context of psychiatric illness and explored through case studies.<sup>34</sup>

Georgia State University researchers made several attempts to contact appropriate personnel at Emory School of Medicine, Morehouse School of Medicine, and the Philadelphia College of Osteopathic Medicine regarding their curriculum requirements, however, researchers were unable to obtain a response.

## NATIONAL PRESCRIPTION DRUG DISPOSAL INITIATIVES

Proper medication disposal is an important method of reducing prescription drug abuse as it limits possible abuse through restricting access. Among persons aged 12 or older in 2009-2010 who used pain relievers non-medically in the past year, 55.0 percent reported obtaining the pain relievers they most recently used through a friend or relative for free, 11.4 percent reported purchasing them from a friend or relative, and 4.8 percent reporting taking them from a friend or relative without asking.<sup>3</sup> Therefore, encouraging members of the community to safely store prescription medications, properly dispose of unneeded and expired prescription medications and providing them with a means of doing so is an important step in limiting drug diversion and abuse.

The Secure and Responsible Drug Disposal Act of 2010 allows communities to accept and dispose of prescription medications without fear of prosecution.<sup>35</sup> The act also allows communities to seek cost relief for providing this health service to the public. Additionally, Congresswoman Louise Slaughter introduced H.R. 2939, the Pharmaceutical Stewardship Act, in September of 2011.<sup>36</sup> This bill would require that pharmaceutical manufacturers and brand owners of drugs marketed in the United States facilitate and provide confidential and safe disposal of any pharmaceuticals. The stewardship would also mandate a collection site in every county of every state in the United States, at the expense of the pharmaceutical manufacturer and brand owner, and if a collection site is not feasible in a particular county then a prepaid disposal envelope must be provided for the prescriptions in that county. This bill is currently being reviewed by the committee.

## **Federal Drug Administration**

The FDA offers general medication disposal guidelines which were developed with the ONDCP.<sup>37</sup> The FDA website includes a downloadable two-page flyer advising proper disposal of medications and also maintains a mailing list and RSS feed, a format for delivering rapidly changing web content to negate the need for consumers to manually check for website changes. As prescriptions are provided with proper disposal information, the FDA recommends individuals refer to these disposal guidelines first. If no information is present, consumers are advised *not* to dispose of the drugs in the drainage systems. The FDA has endorsed drug take-back programs, which are becoming prominent in numerous communities.

Should there be no disposal information available with the prescription no take-back program available, the FDA recommends that consumers remove any identifying information from the containers, remove the pills from their containers and combine them with something unpleasant like used coffee grounds or used kitty litter and then place in sealable bag before placing in the garbage. This process is recommended for over-the-counter drugs (OTC) also.

The FDA provides a short list of medications recommended for immediate disposal by flushing to maximize family and pet safety. This list, which includes prescription painkillers such as Oxycontin, Percocet, and Dilauded, is revised on an as needed basis to include any new harmful and potentially fatal medications. However, the flushing of medications has been staunchly opposed by the Georgia Association of Water Professionals as medications contaminate the water supply and may pose a danger to the public's health. According to Jack Dozier, Executive Director of the Georgia Association of Water Professionals, pharmaceuticals and other chemicals from personal care items have been detected in minute quantities in the

public water supply. Waste water treatment plants are currently unequipped to remove these contaminants, and the effects of these contaminants are currently unknown. While Mr. Dozier does not promote a specific form of disposal (e.g. incineration or landfill disposal) he strongly discourages flushing pharmaceuticals.<sup>38</sup>

### **National Take Back Initiative**

The Drug Enforcement Agency (DEA), in conjunction with local communities, initiated National Drug Take-Back Days in 2010. During national take back events, community members are provided with the opportunity to drop off their unused medications at specific locations. Two National Take Back Days were scheduled in 2011 and the first Take Back Day in 2012 has been scheduled for April 25<sup>th</sup>. This national initiative is open to the public; the [www.dea.gov](http://www.dea.gov) website<sup>39</sup> houses a database of drop-off sites which consumers can search by zip code. The database is available within a month of the event; counties and law enforcement agencies interested in participating may call the DEA Atlanta office to host a site.

### **The SMARxT Disposal Campaign**

The U.S. Fish and Wildlife Service, the American Pharmacists Association and the Pharmaceutical Research and Manufacturers of America developed the SMARxT Disposal Campaign. This campaign offers proper medication disposal information, and, like the FDA and DEA websites, includes information such as restricting drainage disposal of medications, proactive trash disposal of medication recommendations, National Prescription Take-Back Initiative participation, and the recommendation that individuals make inquiries with their pharmacists for proper disposal of drugs.<sup>40</sup> This program was developed primarily to protect area wildlife from exposure to medications in their drinking water.

Walmart joined the SMARxT Disposal campaign in April 2011, which resulted in the posting of signs in all 3,500 pharmacy locations and online at [www.walmart.com](http://www.walmart.com). The signs provide information on the proper disposal of prescription medications. The retailer will also be printing proper disposal information on the medication bags distributed to customers receiving prescriptions.

### **The American Medicine Chest Challenge**

As discussed previously in the *National Education Efforts* section of this report, the American Medicine Chest Challenge (AMCC) is a community-based public awareness initiative, which has partnered with law enforcement. The American Medicine Chest Challenge seeks to provide a national focus for prescription drug abuse through an annual nationwide medication disposal day on the second Saturday of November. In November 2012, AMCC will be sponsoring its third annual National Day of Awareness. In January 2012, AMCC launched a national online directory of prescription drug disposal boxes. At the time of launch, only 10 states listed disposal sites, but this number is expected to increase over time. AMCC seeks to become a national hub for medication disposal programs.<sup>24</sup>

### **The Drug Take Back Network**

The Drug Take Back Network is a website designed by the Product Stewardship Institute to be an accessible online resource for take back programs.<sup>41</sup> This website maintains a list of recurring take back events, organized by state. The goal of this organization is to create an online network of resources for states, counties and local organizations to use towards the goal of decreasing drug abuse and accidental poisonings.

The website also provides educational information on initiating take back programs in local communities and resources on prescription medication disposal research, legislation and addiction issues. The website provides a hyperlink to [www.earth911.com](http://www.earth911.com),<sup>42</sup> a private company that provides consumers with a search engine to find recycling facilities. The Drug Take Back Network recommends Earth911 as a resource to promote one-time medication take back events in various communities. As of February 2012, Georgia is not one of the 23 states listed as having regularly occurring prescription drug take back programs on this website.

## **GEORGIA PRESCRIPTION DRUG DISPOSAL INITIATIVES**

### **Georgia National Association of Drug Diversion Investigators (NADDI)**

The National Association of Drug Diversion Investigators (NADDI) is a non-profit organization that works with law enforcement, health care professionals, state regulatory agencies and pharmaceutical companies to prevent prescription drug abuse and diversion.<sup>43</sup> The primary activities of NADDI include education, training, information sharing and developing tools to assist with the goals of investigating and preventing prescription drug abuse. NADDI currently has 22 state chapters that represent 24 states and intends to eventually have chapters representing all 50 states. The Georgia chapter currently has trainings scheduled and a Health Facility Diversion Conference scheduled. They are currently planning a mass take back program in the Atlanta metro area. Georgia NADDI is also working with the Hall County Drug Coalition and their *Face It People* campaign.

## Georgia Counties

More than half of the 159 Georgia counties have participated in National Take Back Days since their initiation. However, there is a limited amount of information about ongoing prescription drug disposal programs. Table 15 details search results for prescription drug disposal programs in all 159 Georgia counties. Information regarding prescription drug disposal programs in Georgia was found by conducting multiple internet searches using county websites found on Georgia.gov and by conducting website searches using the Google search engine.

Table 37. Drug Disposal Initiatives Among 159 Georgia Counties

County	National Take Back Day Participant Y/N?	Local Ongoing Rx Disposal Program Y/N?
Appling	Yes	No
Atkinson	Yes	No
Bacon	No	No
Baker	No	No
Baldwin	Yes	No
Banks	No	No
Barrow	Yes	No
Bartow	Yes	No
Ben Hill	No	No
Berrien	Yes	No
Bibb	Yes	No
Bleckley	Yes	No
Brantley	No	No
Brooks	No	No
Bryan	Yes	No
Bulloch	Yes	Yes*
Burke	Yes	No
Butts	No	No
Calhoun	No	No
Camden	No	No
Candler	Yes	No
Carroll	Yes	No

Catoosa	Yes	No
Charlton	No	No
Chatham	Yes	No
Chattahoochee	No	No
Chattooga	No	No
Cherokee	Yes	No
Clarke	Yes	No
Clay	Yes	No
Clayton	Yes	Yes*
Clinch	Yes	No
Cobb	Yes	No
Coffee	No	No
Colquitt	No	No
Columbia	No	No
Cook	Yes	No
Coweta	Yes	Yes*
Crawford	No	No
Crisp	No	No
Dade	Yes	No
Dawson	Yes	No
Decatur	Yes	No
DeKalb	Yes	No
Dodge	Yes	No
Dooly	No	No
Dougherty	Yes	No
Douglas	Yes	No
Early	Yes	No
Echols	Yes	No
Effingham	Yes	No
Elbert	No	No
Emanuel	Yes	No
Evans	Yes	No
Fannin	Yes	No
Fayette	Yes	No
Floyd	Yes	No
Forsyth	Yes	No
Franklin	No	No
Fulton	Yes	No
Gilmer	Yes	No
Glascocock	No	No
Glynn	Yes	No
Gordon	No	No
Grady	No	No

Greene	No	No
Gwinnett	Yes	No
Habersham	No	No
Hall	Yes	No
Hancock	No	No
Haralson	No	No
Harris	Yes	No
Hart	Yes	No
Heard	No	No
Henry	Yes	No
Houston	Yes	No
Irwin	No	No
Jackson	Yes	No
Jasper	Yes	No
Jeff Davis	Yes	No
Jefferson	Yes	No
Jenkins	No	No
Johnson	No	No
Jones	No	No
Lamar	Yes	No
Lanier	Yes	No
Laurens	No	No
Lee	Yes	No
Liberty	Yes	No
Lincoln	No	No
Long	No	No
Lowndes	Yes	No
Lumpkin	Yes	No
Macon	No	No
Madison	No	No
Marion	No	No
McDuffie	Yes	No
McIntosh	No	No
Meriwether	No	No
Miller	Yes	No
Mitchell	No	No
Monroe	No	No
Montgomery	Yes	No
Morgan	Yes	No
Murray	No	No
Muscogee	Yes	No
Newton	Yes	No
Oconee	Yes	No

Oglethorpe	Yes	No
Paulding	Yes	No
Peach	No	No
Pickens	No	No
Pierce	No	No
Pike	Yes	No
Polk	Yes	No
Pulaski	No	No
Putnam	Yes	No
Quitman	No	No
Rabun	No	No
Randolph	Yes	No
Richmond	Yes	No
Rockdale	Yes	No
Schley	Yes	No
Screven	No	No
Seminole	Yes	No
Spalding	No	No
Stephens	Yes	Yes*
Stewart	No	No
Sumter	No	No
Talbot	No	No
Taliaferro	No	No
Tattnell	Yes	No
Taylor	Yes	No
Telfair	No	No
Terrell	No	No
Thomas	No	No
Tift	No	No
Toombs	Yes	No
Towns	Yes	No
Treutlen	No	No
Troup	Yes	No
Turner	No	No
Twiggs	No	No
Union	Yes	No
Upson	Yes	Yes*
Walker	Yes	No
Walton	Yes	No
Ware	No	No
Warren	No	No
Washington	Yes	No
Wayne	Yes	No

<b>Webster</b>	No	No
<b>Wheeler</b>	No	No
<b>White</b>	No	No
<b>Whitfield</b>	Yes	No
<b>Wilcox</b>	No	No
<b>Wilkes</b>	No	No
<b>Wilkinson</b>	Yes	No
<b>Worth</b>	Yes	No

\***Bulloch County** expanded their take-back event by installing prescription medication drop boxes at multiple locations in the county that are available year round.<sup>44</sup>

\***Clayton County** - Every spring on the 4th Saturday in April, Clayton County hosts Household Hazardous Waste Amnesty Day, where in addition to general household hazardous materials, residents can dispose of over-the-counter and prescription medications.<sup>45</sup>

\***Coweta County** - The Coweta County Sheriff's Office has a prescription medication disposal drop-box in the parking lot. Residents may dispose of medication in this drop box at any time.<sup>46</sup>

\***Stephens County** - Stephens County has installed a prescription disposal drop box in the Toccoa Police Department that is available throughout the year.<sup>47</sup>

\***Upson County** - The Thomaston Police Department, working with the DEA, plans to make the police department pill drop location permanent.<sup>48</sup>

In order to obtain further information about participation in prescription drug disposal programs among Georgia counties, GSU researchers contacted Barbara A. Heath, Diversion Program Manager of the Atlanta Field Division of the DEA. Ms. Heath provided GSU researchers with information on Georgia counties' participation in prescription drug take-back

events since their inception in 2010 (Appendix B). Information includes the site name, number of drop off boxes and the weight of medications collected.

## **PRESCRIPTION DRUG MONITORING PROGRAMS: U.S.**

In addition to prescription drug disposal programs, prescription drug monitoring programs (PDMP) are another tool utilized by states to address prescription drug abuse and diversion. A PDMP is a statewide electronic database established for the collection and distribution of information regarding controlled substances dispensed within the state. These programs are authorized by state legislation, are usually housed by a state agency such as a health department or law enforcement agency and are paid for by a combination of state and federal funds. As of January, 2012, the majority of states had operational PDMPs. Eight states, including Georgia, have enacted legislation to establish a PDMP, though they are not yet operational, and two states currently have legislation pending.<sup>49</sup>

While prescription drug monitoring programs vary across states with regard to the schedules of drugs tracked and authorized users (e.g. physicians, dispensers, law enforcement), they typically require retail pharmacists to enter prescription data for controlled substances dispensed. Data collected generally include the drug dose, type and amount dispensed, as well as the prescriber, dispenser and patient information. The program may provide data on indicators of abuse and diversion including number of prescribers, number of pharmacies used, the use of brand over generic drugs, escalation of dose and early refills.<sup>50</sup> The database may be accessed by physicians and other authorized users, enabling them to review the substance use history of their patients. Proactive programs not only allow access by authorized users, they

also automatically generate reports for prescribers, dispensers and law enforcement once a certain criteria has been met. For example, once a patient reaches or exceeds a certain threshold of prescriptions, the patient's physician will be automatically notified by the system. This allows physicians to identify patients with substance use issues or those who may be diverting drugs.

The National Alliance for Model State Drug Laws (NAMSDL) has outlined the following benefits of PDMPs:

- 1) Support access to legitimate medical use of controlled substances
- 2) Identify and deter or prevent drug abuse and diversion
- 3) Facilitate and encourage the identification, intervention with and treatment of persons addicted to prescription drugs
- 4) Inform public health initiatives through outlining of use and abuse trends
- 5) Educate individuals about PDMPs and the use, abuse, diversion of and addiction to prescription drugs.<sup>51</sup>

Benefits to clinicians include the ability to access accurate background information of new patients, allow for the monitoring of current patients and assist providers in coordinating care for those who may be abusing prescriptions. Additionally, PDMPs may help identify inappropriate prescribing practices among physicians and questionable practices among pharmacies, as well as prescription forgery and fraud. Importantly, they have the potential to aid in tracking legitimate medical use as well as non-medical use of opioids to inform public policy with regard to opioid access and racial disparities.<sup>52</sup>

Two sources of federal funding are currently available for state PDMPs. The Harold Rogers Prescription Monitoring Program (HRPDMP) provides funds for the planning, implementation and enhancement of PDMPs and is administered by the U.S. Department of Justice. The purpose of the HRPDMP is to enhance the capacity of regulatory and law enforcement agencies and public health officials to collect and analyze controlled substance data. The National All Schedules Prescription Electronic Reporting Act (NASPER) makes funds available through Department of Health and Human Services in order to foster the establishment or enhancement of PDMPs in order to meet national program criteria and enable interstate exchange of information.<sup>50</sup>

### **Impact of Prescription Drug Monitoring Programs**

Evidence of the effectiveness of PDMPs in reducing prescription drug abuse and deaths due to unintentional overdoses are mixed. According to the ONDCP, several research studies have demonstrated the effectiveness of PDMPs. A 2010 study found that the use of PDMP data in an emergency room altered prescribing practices among clinicians. Physicians altered prescribing for 41% of patients after reviewing PDMP data resulting in 61% of patients receiving fewer or no opioid medicines than previously planned and 39% receiving more opioid medication than previously planned because the physician was able to confirm that patients did not have a recent history of controlled substance use.<sup>53</sup>

Prescription Drug Monitoring Programs in Wyoming and Kentucky have also demonstrated success. Between 2008 and 2009, Wyoming experienced a decrease in automatically generated reports of patients who had met or exceeded their prescription thresholds while experiencing an increase in reports requested by physicians. Therefore, fewer

patients met the threshold for “doctor shopping”, which may have resulted from physicians altering their prescribing practices based on information provided from PDMP data. Further, an independent evaluation of KASPER, Kentucky’s PDMP, found that 90% of those surveyed believed the program was effective in preventing doctor shopping, diversion and prescription drug abuse.<sup>54</sup>

However, a recently published observational study of operational PDMPs from 1999 to 2005 found that PDMPs were not significantly associated with lower rates of drug overdose, opioid overdose mortality or lower rates of opioid drug use for any of the study years.<sup>55</sup> Further, the study revealed that states with proactive PDMPs did not have lower rates of drug overdose or opioid mortality than other PDMP states regardless of the number of reports automatically generated.

Among these findings, however, the researchers observed that California, New York and Texas have had lower rates of opioid prescribing and deaths due to overdose than other states with PDMPs suggesting that aspects of these states’ drug control programs may be more effective than those of other states. One explanation provided by the authors of the study is that these three states continue to use serialized, tamper resistant prescription forms while other states have discontinued their use. Because there are other factors that may influence drug use and overdose rates, such as large population size, use of PDMP data or the availability of heroin, no definitive conclusions about the effect of tamper resistant prescription forms on drug use and mortality may be drawn on the basis of this study.<sup>55</sup>

With regard to the primary study finding that PDMPs were not associated with lower rates of drug overdose, opioid overdose mortality or lower rates of opioid drug use, Kerikowske et al.<sup>56</sup> detail several of the study's limitations which may have influenced the outcomes. These limitations include the following: The study did not account for the utilization of PDMPs by health care providers; over 20 percent of the states with PDMPs were in their first few years of operation, which may have affected physician utilization; nearly half (47%) of the PDMPs submitted data on a biweekly or monthly basis; many programs did not capture dispensing directly from physicians; PDMPs differed with respect to the types of drugs reported and authorized users. Further, the PDMPs were not yet web-based, causing long wait times for physician requests and data sharing between the states was not yet operational.

Taking all existing research into account, the ONDCP has concluded that PDMPs appear to be a promising approach to reducing prescription drug abuse and diversion, but emphasize that it is necessary to continue working to maximize their effectiveness. A recent agency publication states that "a major effort must be undertaken to improve the functioning of state PDMPs, especially regarding real-time data access by clinicians, and to increase inter-state operability and communication"(p. 6).<sup>14</sup> In order to further these goals, the ONDCP will take the following actions:

- work with states to establish effective PDMPs in every state, including leveraging state electronic health information exchange activities, requiring prescribers and dispensers to be trained in their appropriate use
- encourage research on PDMPs to determine current effectiveness and identify ways to improve effectiveness

- work with Congress to pass legislation to authorize the Secretary of Veterans Affairs (VA) and the Department of Defense (DOD) to share patient information on controlled substance prescriptions with state PDMPs
- encourage federally funded health care programs such as the Indian Health Service (IHS), DOD and VA (when authorized to do so) to provide controlled substance prescription information electronically to the PDMPs in states in which they operate health care facilities or pharmacies. In addition, DOD, VA, and IHS are encouraged to evaluate the practice of having prescribers check PDMPs for patient controlled substance prescription histories before generating prescriptions for controlled substances
- explore the feasibility of providing reimbursement to prescribers who check PDMPs before writing controlled substance prescriptions for patients covered under insurance plans
- evaluate existing programs that require doctor shoppers and people abusing prescription drugs to use only one doctor and one pharmacy
- work with the Department of Health and Human Services (DHHS) and Centers for Medicare and Medicaid Services (CMS) to evaluate the utility of state PDMPs for reducing Medicare and Medicaid fraud, as suggested in the 2009 GAO report—  
Medicaid: Fraud and Abuse Related to Controlled Substances Identified in Selected States
- issue the Final Rule on DEA Electronic Prescribing of Controlled Substances

- increase the use of Screening, Brief Intervention, and Referral to Treatment (SBIRT) programs to help healthcare providers identify and prevent prescription drug abuse problems in primary healthcare settings by working with healthcare providers to increase awareness and training for these programs and incorporating the use of Health Information Technologies (HIT) such as electronic health records to enhance SBIRT programs
- identify ways in which health information technologies (HIT) such as electronic health records can improve prescription drug abuse information
- test the usefulness of CDC's real-time BioSense surveillance system for generating timely, population-based measures of prescription drug abuse in selected communities. In addition, use information from the NIDA Community Epidemiology Workgroup to monitor and detect locations where increased abuse is occurring to help target limited resources
- assess the usefulness of the Drug Abuse Warning Network (DAWN) and how it can best be used for community epidemiology
- expand upon Department of Justice (DOJ) pilot efforts to build PDMP interoperability across state lines, including leveraging state electronic health information exchange activities. Work to expand interstate data sharing among PDMPs through the Prescription Drug Information Exchange (PMIX)
- evaluate current databases that measure the extent of prescription drug use, misuse, and toxicity, clinical use of safe opioid prescribing practices, and access to high-quality

pain management services, focusing on improving these databases and identifying new sources of data<sup>14</sup>

## **PRESCRIPTION DRUG MONITORING PROGRAM: GEORGIA**

In May 2011, the Governor of Georgia signed into law Senate Bill 36, the authorizing legislation for the establishment of a PDMP and Electronic Database Review Advisory Committee. The program will be administered by the Georgia Drugs and Narcotics Agency (GDNA) with direction and oversight provided by the established board.<sup>57</sup> The legislation calls for the program to monitor the prescribing and dispensing of Schedule II, III, IV, and V controlled substances through:

- requiring dispensers (with specific exceptions) to submit information regarding the dispensing of such controlled substances to include at a minimum
  - approved prescriber identification number or prescriber's DEA permit number
  - date the prescription was issued by the prescriber and date it was dispensed
  - prescription serial number
  - National Drug Code (NDC) for drug dispensed
  - quantity and strength dispensed
  - number of days / supply of the drug
  - patient's name, address, date of birth, and gender
  - method of payment
- requiring each dispenser to submit the prescription information required in accordance with transmission methods and frequency requirements established by the GDNA on at

least a weekly basis, and to report such prescription information no later than ten days after the prescription is dispensed

- provide grant funding to dispensers to cover the costs of equipment and software used to comply with reporting requirements
- provide for the confidentiality of submitted information. Information collected will be made available only to:
  - persons authorized to prescribe or dispense controlled substances for the sole purpose of providing medical or pharmaceutical care to a specific patient;
  - the patient, prescriber, or dispenser about whom the prescription information requested concerns or upon the request on his or her behalf of his or her attorney;
  - local, state, or federal law enforcement or prosecutorial officials pursuant to the issuance of a search warrant;
  - the agency or the Georgia Composite Medical Board upon the issuance of an administrative subpoena issued by a Georgia state administrative law judge.
  - Additionally, the board may provide data to government entities for statistical, research, educational, or grant application purposes after removing information that could be used to identify prescribers or individual patients or persons who received prescriptions from dispensers.
- provide for the establishment of an Electronic Database Review Advisory Committee to consist of ten members including:
  - a representative from the GDNA

- a representative from the Georgia Composite Medical Board
- A representative from the Georgia Board of Dentistry
- a representative with expertise in personal privacy matters, appointed by the President of the State Bar of Georgia
- a representative from a specialty profession that deals in addictive medicine, appointed by the Georgia Composite Medical Board
- a pain management specialist, appointed by the Georgia Composite Medical Board
- an oncologist, appointed by the Georgia Composite Medical Board
- a representative from a hospice or hospice organization, appointed by the Georgia Composite Medical Board
- representative from the State Board of Optometry
- a consumer member appointed by the Governor to the State Board of Pharmacy
- require that hard copy prescriptions for Schedule II controlled substances be on security paper and require identification from persons picking up certain prescriptions. A pharmacist shall require a person picking up a Schedule II controlled substance prescription to present a government issued photo identification document or such other form of identification which documents legibly the full name of the person taking possession of the Schedule II controlled substance.<sup>57</sup>

While Georgia SB 36 establishes the guidelines for establishing the Georgia PDMP, there does not appear to be a provision in the bill which allows the sharing of data across state lines as is recommended by the Office of National Drug Control Policy. In an effort to facilitate the

sharing of prescription drug data between states, the Alliance of States with Prescription Drug Monitoring Programs has developed the Prescription Monitoring Information Exchange (PMIX).

However, in order to participate in PMIX, states must meet the following criteria:

1. have legislation enabling it to share live patient data with other states
2. have identified at least one other state to serve as an exchange partner
3. have either a memorandum of understanding to share with the identified exchange partner(s) or has ratified the Prescription Monitoring Interstate Compact<sup>58</sup>

Brandeis University, home of the Prescription Monitoring Program Center of Excellence, has emphasized the importance of data sharing across state lines as well as innovative practices for monitoring prescription drug abuse. Interstate data sharing will allow for the identification of cases of drug diversion that do not meet single-state thresholds, and the identification of patterns of diversion and abuse over a wider geographic area. An example of the effectiveness of such data sharing is demonstrated through the geographic mapping of prescriptions, providers and patients in Georgia and Alabama.<sup>59</sup> Figure 29 depicts the average number of patients per Georgia prescriber for prescriptions filled in Alabama in 2009 according to Georgia zip code. The map demonstrates that Georgia prescribers in certain zip codes prescribed to as many as 148 to 437 patients who filled prescriptions in Alabama.

**Figure 29. Average Number of Patients per GA Prescriber for Prescriptions Filled in AL in 2009, by GA Zip Code**

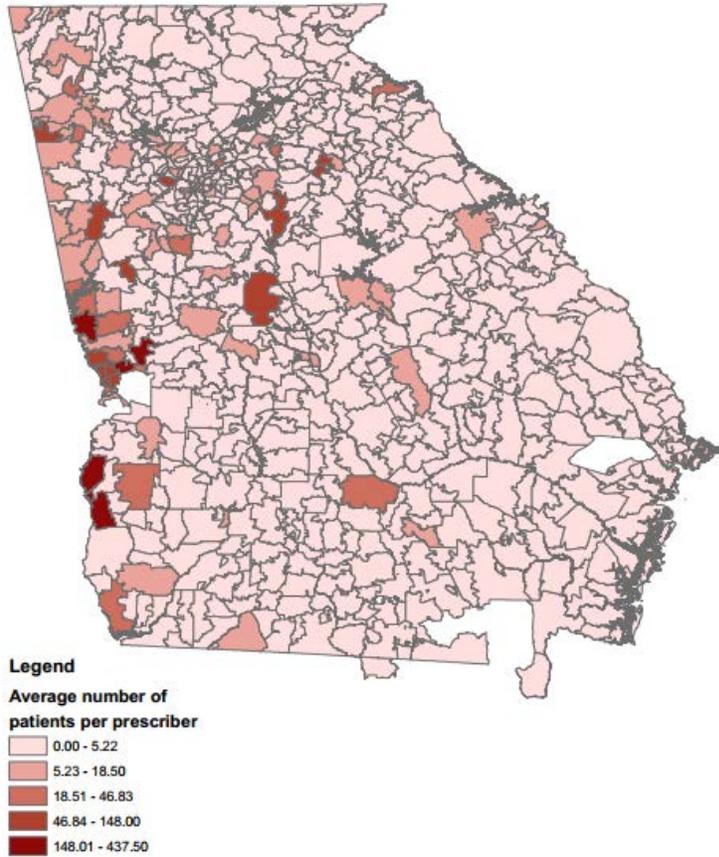
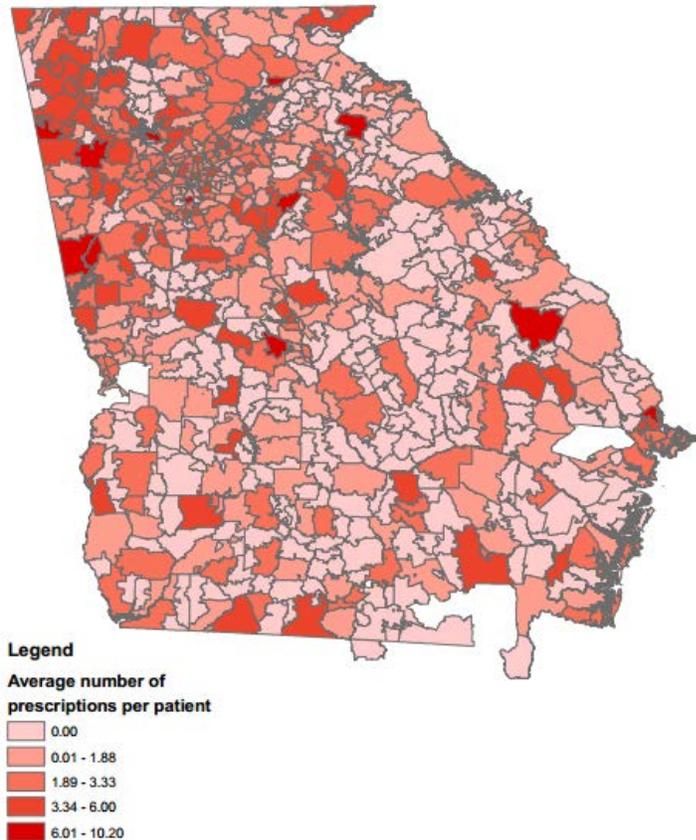


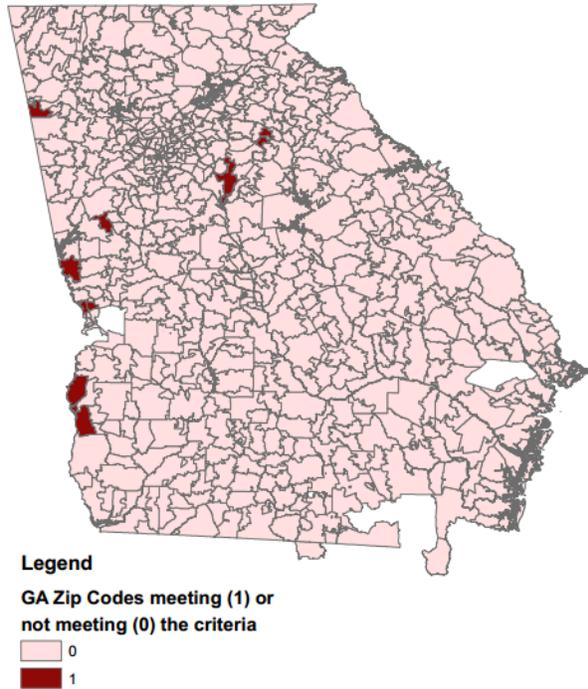
Figure 30 depicts the average number of prescriptions per patient in 2009 for prescriptions that originated in Georgia and were filled in Alabama according to Georgia zip code. In many Georgia zip codes, patients had an average of 6-10 prescriptions that were filled in Alabama.

**Figure 30. Average Number of Prescriptions per Patient, 2009 Prescriptions Originating in GA and Filled in AL, by GA Zip Code**



Combining the data from these two maps allowed for the identification and visual presentation of Georgia zip codes with more than 100 patients per prescriber, and more than two prescriptions per patient (figure 31). This data garnered from Georgia and Alabama allowed for the potential identification of unscrupulous prescribing practices among some Georgia practitioners, providing important information for intervention.

**Figure 31. GA Zip Codes with More than 100 Patients per Prescriber and More Than two Prescriptions per Patient, on Average for prescriptions filled in AL in 2009**



Regarding best practice implementation of PDMPs, the CDC recommends that in addition to utilizing data to identify high risk patients and prescribers who deviate from acceptable prescribing practices, states integrate PDMP data with electronic health records so that PDMP data is better integrated into the day-to-day practices of clinicians. Further, the CDC recommends that state benefit programs such as Medicaid and workers' compensation utilize patient prescription claims to identify cases of potential prescription drug abuse and diversion so that effective interventions may be implemented.<sup>12</sup>

## NATIONAL DRUG ENFORCMENT

The number of prescriptions written by medical professionals has increased dramatically over the past decade. The nonmedical use or abuse of prescription drugs is now seen as a serious and growing public health problem, with an estimated 52 million people having used prescription drugs for nonmedical reasons in their lifetimes.<sup>60</sup> Increasing medical use of opioid medications has also contributed to the growing epidemic. The total number of opioid prescriptions dispensed from retail pharmacies increased from 76 million in 1991 to 210 million in 2010.<sup>60</sup> Prescription drug abuse has emerged the fastest growing drug problem in the U.S., affecting millions of individuals each year.

Prescription drug diversion, defined as the transfer of a prescription drug from a lawful to an unlawful channel of distribution or use, has been strongly linked with prescription drug abuse.<sup>61</sup> The three primary modes of prescription drug diversion that have emerged in recent years are the illegal sale of prescriptions by physicians, “doctor shopping” by individuals who visit numerous physicians to obtain multiple prescriptions, and “pill mills”.<sup>61</sup>

Along with the increased legitimate use of prescription opioid medications in health care settings, the rise in prescription drug dispensation can partially be attributed to practitioners who abuse their prescribing privileges by prescribing these medications outside the usual course of professional practice or for illegitimate purposes. This has resulted in practitioners illegally prescribing and/or dispensing prescription controlled substances and other prescription drugs under the guise of medical care.<sup>61</sup> In addition, a number of patient-centered abuses have evolved, most notably “doctor shopping.” Doctor shoppers visit multiple prescribers to obtain controlled substances without the prescribers’ knowledge.<sup>62</sup> A third means of drug diversion,

“pill mills”, are prolific and indiscriminate distributors of opioid analgesics. The term “pill mill” is typically used to describe a for-profit clinic that distributes controlled prescription drugs with minimal medical evaluation.<sup>1</sup>

Among those who are currently taking prescription opioid drugs, 10% are prescribed high doses ( $\geq 100$  mg morphine equivalent dose per day) by single prescribers. These high-dosage users account for an estimated 40% of prescription drug overdoses.<sup>1</sup> High-dosage users are also likely diverting or providing drugs to others who are using them without prescriptions. A majority (76%) of nonmedical users report taking drugs that had been prescribed to someone else; only 20% report that they acquired the drug from their own doctor.<sup>3</sup> Among those who died from prescription opioid overdoses, a significant percentage did not have a prescription for the opioid that led to their death. This data suggests that prevention of opioid overdose deaths should focus on strategies that target high-dosage users, doctor shoppers, and others that are likely involved in drug diversion.

Reducing the amount of prescription opioids being dispensed by pill mills is to some extent a law enforcement issue, but also a regulatory problem involving manufacturers, distributors, and dispensing physicians. This problem is being addressed in part through the FDA’s proposed Risk Evaluation and Mitigation Strategy (REMS), which will result in closer monitoring of prescribing and dispensing practices, as well as patient and physician education.<sup>31</sup> Additionally, statewide PDMPs can track doctor shoppers, persons routinely obtaining early refills, and persons engaged in other inappropriate behaviors.<sup>50</sup> A second strategy involves enacting new legislation and enforcing existing laws. The majority of states currently have laws prohibiting doctor shopping, but they are not consistently enforced. In contrast, few states

have laws regulating pill mills. Laws against pill mills and doctor shopping, as well as laws that require that physicians perform physical examinations before prescribing medication, can help reduce the diversion of these drugs for nonmedical use.<sup>1</sup> Many states have enacted various forms of legislation aimed at mitigating prescription drug abuse:

- Doctor shopping laws are used to deter and prosecute people obtaining multiple prescriptions for controlled substances from different healthcare practitioners without their knowledge.
- Immunity laws provide a degree of immunity to an individual seeking help for themselves or for others experiencing an overdose.
- Interstate sharing of information laws allow data from a state's PDMP to be shared with authorized individuals in other states.
- Pain management clinic oversight laws require state oversight of pain management clinics or describe specific registration, licensure, or ownership requirements for pain management clinics.
- Physical examinations before prescribing laws require healthcare practitioners to examine the patient or obtain a patient history and perform a patient evaluation prior to prescribing a controlled substance.
- Required identification before dispensing laws require that pharmacies request identification prior to dispensing a controlled substance.
- Tamper-resistant form laws require special tamper-resistant forms for controlled substances.<sup>63</sup>

At the national level, the ONDCP establishes policies, priorities, and objectives for national drug control programs in order to reduce illicit drug use, drug-related crime and violence, and drug-related health consequences. The 2011 Report titled *Epidemic: Responding to America's Prescription Drug Abuse Crisis*, includes an enforcement component that calls on law enforcement agencies to help decrease prescription drug diversion and abuse.<sup>14</sup> The plan outlines specific actions the federal government can take to help law enforcement agencies effectively address pill mills and doctor shopping:

- The Office of National Drug Control Policy (ONDCP), the National Methamphetamine and Pharmaceutical Initiative (NMPI), a law enforcement training initiative funded by the High Intensity Drug Trafficking Areas (HIDTA) Program, and the Drug Enforcement Administration (DEA) will contribute to the curriculum for the pharmaceutical crime investigation and prosecution training program sponsored by Bureau of Justice Assistance (BJA) in 2011. Training will be targeted to states with the highest need.
- The ONDCP together with the DEA will increase training to law enforcement and prosecutor groups at national and regional conferences.
- The Department of Justice (DOJ), DEA, HHS, and State Medical Boards will continue aggressive enforcement actions against pain clinics and prescribers who are not prescribing within the usual course of practice and not for legitimate medical purposes.
- The ONDCP will work with the appropriate groups to write and disseminate a Model Pain Clinic Regulation Law taking into consideration: 1) registration of these facilities with a state entity 2) guidance for rules regarding number of employees, location, hours of operation 3) penalties for operating, owning, or managing a non-registered pain clinic

4) requirements for counterfeit-resistant prescription pads and reports of theft/loss of such pads 5) disciplinary procedures to enforce the regulations and 6) a procedure to allow patient records to be reviewed during regular state inspections.

- The ONDCP, HIDTA, DOJ and DEA will increase HIDTA intelligence-gathering and investigation of prescription drug trafficking, and increase joint investigations by Federal, state, and local agencies.
- The ONDCP, DOJ, DEA, HHS, and FDA will identify and seek to remove administrative and regulatory barriers to “pill mill” and prescriber investigations that impair investigations while not serving another public policy goal.
- The DOJ and DEA will expand the use of PDMP data to identify criminal prescribers and clinics by the volume of selected drugs prescribed, and encourage best practices for PDMPs, such as PDMP reporting of such prescribers and clinics to pharmacies, law enforcement, and insurance providers.
- The DOJ and BJA will use PDMP data to identify “doctor shoppers” by their numbers of prescribers or pharmacies, and encourage best practices such as identifying such individuals to their prescribers and pharmacies, law enforcement and insurance providers.<sup>14</sup>

In March of 2011 H.R.1065, or the Pill Mill Crackdown Act of 2011, was introduced into Congress. The Pill Mill Crackdown Act aims to amend the Controlled Substances Act in order to reduce the number of pill mills nationally using a three pronged approach: (1) double the term of imprisonment and triple the fine for the operator of a pill mill (2) increase the penalties of a pill mill operator that distributes a controlled substance to a person under age 21 from two to

three times the maximum punishment, and (3) reclassify hydrocodone combination drugs to Schedule II narcotics in order to better monitor their distribution and decrease access to people using them for non-medical purposes. Additionally, the act would require the proceeds from any pill mill raids to be used for controlled substance monitoring programs and for community mental health services block grants that aim to better prevent and treat substance abuse. H.R. 1065 is scheduled to be voted on in the spring of 2012.<sup>64</sup>

## **GEORGIA DRUG ENFORCEMENT**

Georgia has not been immune to the detrimental effects of prescription drug abuse. Prescription drug-related overdose deaths increased by 10 percent from 2009 to 2010<sup>13</sup>, and the overall percentage of persons 12 years of age and older who used pain relievers for nonmedical purposes has remained relatively stable over the past decade.<sup>3</sup> The increase in pill mills in Georgia threatens to increase these rates further.

In order to combat its own pill mill epidemic, Florida passed legislation in 2010 that severely inhibited pill mill operations, causing over 400 operations to shut down between 2010 and 2011. As a result, Georgia saw an increase in pill mills by over 100% in 2011, mainly as a result of the state's proximity and lack of active monitoring programs.<sup>65</sup> Although Georgia enacted legislation in November of 2011 to establish a prescription drug monitoring program (PDMP) and the establishment of an Electronic Database Review Advisory Committee, SB 36, Georgia's PDMP it will not be operational until January of 2013.

In the current absence of a statewide pill mill laws, some Georgia counties and cities have adopted local ordinances to fight new and current pill mill operations. In addition to the

recent passage of Georgia's Prescription Drug Monitoring Program, a number of organizations dedicated to ameliorating the epidemic of prescription drug abuse exist.

### **High Intensity Drug Trafficking Areas Program**

The aim of the High Intensity Drug Trafficking Areas (HIDTA) program is to enhance and coordinate drug control efforts among local, state, and Federal law enforcement agencies. In designated HIDTA counties, the program provides agencies with coordination, equipment, technology, and additional resources to combat drug trafficking and its harmful consequences. Georgia has twelve HIDTAs including the City of Atlanta, Hartsfield-Jackson Atlanta International Airport, and Barrow, Bartow, Cherokee, Clayton, Cobb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, and DeKalb counties. In 2010, the Atlanta HIDTA formed a pharmaceutical advisory committee, which provides resources to directly address the significant prescription drug abuse problems in designated counties of Georgia. The Atlanta HIDTA also hosts an annual prevention conference which provides an opportunity for law enforcement, treatment providers, and drug demand reduction professionals to learn about developing trends, changes, or anomalies that better prepare the community to set priorities, prepare for coming issues, and build relationships across the community involved with drug abuse.<sup>66</sup>

### **Georgia Drugs and Narcotics Agency**

The Georgia Drugs and Narcotics Agency (GNDA) plays an important role in Georgia's fight against prescription drug abuse, and their services span every county in the state. The Georgia Drugs and Narcotics Agency's specially trained agents investigate violations of the

Georgia Controlled Substances Act and Dangerous Drug Act with regard to diversion of legitimately manufactured pharmaceuticals and how they are distributed, dispensed, or transferred by registered Georgia firms. The Georgia Drugs and Narcotics Agency inspects every facility licensed by the state to handle, possess, distribute or dispense pharmaceuticals. In addition, they provide education to law enforcement entities, registrants, and the general public on the current drugs of abuse, while acting as the law enforcement and regulatory division for the Georgia State Board of Pharmacy. Additionally, it serves as the information resource for pharmacy and drug questions for registrants, the general public, and law enforcement.<sup>67</sup>

### **National Association of Drug Diversion Investigators**

The National Association of Drug Diversion Investigators (NADDI) of Georgia is a non-profit 501(c)(3) organization that facilitates cooperation between law enforcement, healthcare professionals, state regulatory agencies, and pharmaceutical manufacturers in the investigation and prevention of prescription drug abuse and diversion. NADDI has more than 2,000 members, including law enforcement, regulatory agents, health professionals, health care fraud investigators and pharmaceutical companies.<sup>68</sup>

### **Punishment**

A number of criminal laws exist under the *Georgia Controlled Substances Act* to mandate prescription drug abuse convictions and punishments in the State. They are as follows:

- If you are found guilty of unlawfully (no legal prescription) purchasing, possessing, or under the control of any controlled substance in Schedule I or Schedule II, you can be found guilty of a felony and sentenced to 2 -15 years of imprisonment. Any subsequent conviction can lead to 5-30 years imprisonment.
- If you are found guilty of unlawfully (without proper licensure) manufacturing, delivering, distributing, dispensing, administering, selling, or possessing with intent to distribute any controlled substance in Schedule I or Schedule II, you can be found guilty of a felony and sentenced to 5 -30 years of imprisonment. Any subsequent conviction can lead to 10-40 years imprisonment.
- If you are found guilty of unlawfully (no legal prescription) purchasing, possessing, or under the control of any controlled substance in Schedule III, IV, or V, you can be found guilty of a felony and sentenced to 1 -5 years of imprisonment. Any subsequent conviction can lead to 1-10 years imprisonment.
- If you are found guilty of unlawfully (without proper licensure) manufacturing, delivering, distributing, dispensing, administering, selling, or possessing with intent to distribute any controlled substance in Schedule III, IV, or V, you can be found guilty of a felony and sentenced to 1 -10 years of imprisonment. Any subsequent conviction can lead to 10-30 years imprisonment.
- If you are found guilty of unlawfully (no legal prescription) purchasing, possessing, or under the control of flunitrazepam a Schedule IV controlled substance, you can be found guilty of a felony and sentenced to 2 -15 years of imprisonment. Any subsequent conviction can lead to 5-30 years imprisonment.

- If you are found guilty of unlawfully (without proper licensure) manufacturing, delivering, distributing, dispensing, administering, selling, or possessing with intent to distribute flunitrazepam a Schedule IV controlled substance, you can be found guilty of a felony and sentenced to 5 -30 years of imprisonment. Any subsequent conviction can lead to 10-40 years or life (not second offense) imprisonment.
- If you are found guilty of possessing substances with intent to use or convey such substances for the manufacture of Schedule I or Schedule II controlled substances, you can be found guilty of a felony and sentenced to 1 -15 years of imprisonment or fined up to \$100,000.00, or both.
- If you are found guilty of knowingly selling, manufacturing, delivering, bringing into the state, or have possession of 4 grams or more of any morphine or opium or any salt, isomer, or salt of an isomer, including heroin, as described in Schedules I and II, or 4 grams or more of any mixture containing any of those substances can be found guilty of the felony offense of trafficking in illegal drugs and, upon conviction may be punished as follows: 1) If the quantity of substances involved is 4 -14 grams, you can be sentenced to a mandatory minimum five years imprisonment and a fine of \$50,000.00, 2) If the quantity of substances involved is 14 -28 grams, you can be sentenced to a mandatory minimum 10 years imprisonment and a fine of \$100,000.00 or 3) If the quantity of substances involved is 28 grams or more, you can be sentenced to a mandatory minimum 25 years imprisonment and a fine of \$500,000.00
- Grounds for suspending or revoking a registration to manufacture, distribute, or dispense a controlled substance by the State Board of Pharmacy are as follows: 1) has

furnished false or fraudulent material information in any application filed to the board under, 2) has been convicted of a felony under any state or federal law relating to any controlled substance, 3) Has had his federal registration to manufacture, distribute, or dispense controlled substances suspended or revoked, 4) has violated any provision of this law or the rules and regulations promulgated under this law or 5) has failed to maintain sufficient controls against diversion of controlled substances into other than legitimate medical, scientific, or industrial channels.

- The law on unauthorized distribution determines that it is unlawful for any person: 1) who is a registrant to distribute a controlled substance classified in Schedule I or II, except pursuant to an order form as required by Code Section 16-13-40, 2) to use, in the course of the manufacture or distribution of a controlled substance, a registration number which is fictitious, revoked, suspended, or issued to another person, 3) to acquire or obtain possession of a controlled substance by misrepresentation, fraud, forgery, deception, subterfuge, or theft, 4) to furnish false or fraudulent material information in, or omit any material information from, any application, report, or other document or record required to be kept or filed by law, 5) to make, distribute, or possess any punch, die, plate, stone, or other thing designed to print, imprint, or reproduce the trademark, trade name, or other identifying mark, imprint, or device of another or any likeness of any of the foregoing, upon any drug or container or labeling thereof so as to render the drug a counterfeit substance or 6) to withhold information from a practitioner that such person has obtained a controlled substance of a similar therapeutic use in a concurrent time period from another practitioner. A conviction of

unauthorized distribution can lead to 8 years imprisonment or a fine up to \$50,000.00, or both.<sup>69</sup>

## RECOMMENDATIONS

Based on the Needs Assessment, the following recommendations are presented.

1. The State of Georgia would benefit from identifying a lead agency which could serve as a primary resource for understanding the problem of prescription drug misuse (such as using prescription drugs prescribed to others and taking prescription drugs not in accordance with their intended use) and abuse across the state. Additionally, the creation of a centralized database for accessing all prescription drug related activities would allow for sharing of effective strategies among Georgia counties, widespread public education messages, and drop off disposal information. Having a central repository for information would be time saving and could help partners synergistically address the drug use and abuse problem so that resources such as time, energy, and attention could be maximized.
2. The State of Georgia would benefit from investing in a well-orchestrated, comprehensive needs assessment that utilized primary data collection. It would be beneficial to conduct a randomized survey of the public as well as stakeholders that could shed light on unique elements of drug use and abuse that exists in Georgia. Since current surveillance systems capture different information about substance abuse, a regularly occurring assessment implemented across the state would be beneficial in tracking the progress of intervention efforts and identifying those areas that require targeting.

3. Unless Georgia agrees to augment its current PDMP by agreeing to share data across state lines, Federal funding of the PDMP will end, thereby putting an end to the program. Therefore such augmentation, in accord with HIPPA guidelines, is recommended. Additionally, supporting the passage of legislation that allows for the sharing of PDMP data across state lines would help to further identify unscrupulous prescribing practices and patient drug diversion.

4. Expanding partnerships across the state to include Georgia schools and Parent Teacher Associations to facilitate the education of both children and parents would aid in the efforts of preventing prescription drug abuse initiation and drug diversion. As evidenced by the literature and the GSHS, children in Georgia are still finding prescription drugs highly accessible. While much focus has been given to opioid pain relievers, drugs such as Ritalin and Adderall, often prescribed to children for Attention Deficit Hyperactivity Disorder (ADHD), are among some of the most popular prescription drugs taken nonmedically. Education specifically regarding prescription medications belonging to children may warrant further emphasis. Continued education efforts, availability of drug disposal sites, and the promotion of in home, permanent drug lock boxes will help reduce the availability of prescription medications to children.

5. Additional partnerships with those working with high-risk populations in Georgia for education and intervention would also be beneficial. Nationally and in Georgia 18-25 year olds have the highest rates of nonmedical use of prescription drugs. Further, those involved in the justice system also tend to have higher rates of prescription drug use. Efforts targeting and providing treatment to high-risk young adults in Georgia would aid in the prevention of further dependence and overdose deaths.

6. Assessing the availability of drug treatment centers in Georgia and ensuring treatment availability for those in need would help reduce the abuse of prescription drugs and aid in the prevention of prescription drug overdoses which are on the rise. Georgia has not reported treatment admissions data to the Treatment Episode Data Set (TEDS) since 2005. Resuming the reporting of this data would provide a valuable surveillance tool to continue to track prescription drug abuse dependence in the state.

7. Utilizing key practices set forth by the Government Accountability Office to implement and evaluate public education efforts, including establishing both process and outcome metrics to measure success would help to ensure the effectiveness of education efforts. Though prescription drug education is central to Georgia efforts, also including other commonly abused medications which are available over the counter, such as cough medicine, would be appropriate.

## **CONCLUSION**

The primary insight to be gained from the complete needs assessment report is that major attention and commitment to addressing the prescription drug policy in Georgia is warranted. Evidence-based programs and activities exist throughout the country and building a comprehensive prescription drug abuse control program is essential for decreasing current patterns of drug abuse behavior as well as preventing avoidable prescription drug abuse related deaths, years of productive life lost, disability, illness, health care and treatment expenses, and further negative consequences associated with prescription drug abuse.

## REFERENCES

1. Centers for Disease Control and Prevention. *Grand Rounds. Prescription Drug Overdoses — a U.S. Epidemic*. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm>. Accessed March 23, 2012.
2. National Survey on Drug Use and Health. *Nonmedical Use of Pain Relievers in Substate Regions: 2004 to 2006*. Available at: <http://www.samhsa.gov/data/2k8/pain/substate.htm>. Accessed March 23, 2012.
3. Substance Abuse and Mental Health Services Administration. *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*. Rockville, MD: Substance Abuse and Mental Health Service Administration; 2011.
4. Johnston L, O'Malley P, Bachman G, Schulenberg, E. (2011). *Monitoring the Future National Survey Results on Drug Use, 1975-2010. Volume I: Secondary school*. Available at: [www.monitoringthefuture.org/pubs/monographs/mtf-overview2011.pdf](http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2011.pdf). Accessed August 26, 2012.
5. Substance Abuse and Mental Health Services Administration. *State Estimates of Substance Use and Mental Disorders from the 2008-2009 National Surveys on Drug Use and Health*, NSDUH Series H-40, HHS Publication No. (SMA) 11-4641. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2011. Available at: <http://store.samhsa.gov/shin/content/SMA11-4641/SMA11-4641.pdf>. Accessed March 15, 2012.
6. The NSDUH Report: *Substance Use Disorders in Substate Regions*. Rockville, MD: Substance Abuse and Mental Health Service Administration; 2010. Available at: [www.samhsa.gov/data/2k10/190/SubstateRegions.htm](http://www.samhsa.gov/data/2k10/190/SubstateRegions.htm). Accessed August 25, 2012.
7. Of Public Service and Research TBI. *Substance Abuse in Georgia*. Georgia Journal of Public Policy. 2011;1(1). Available at: <http://digitalcommons.kennesaw.edu/gjpp/vol1/iss1/5>. Accessed March 8, 2012.
8. Barge J. *Georgia Student Health Survey 2010-2011*. Atlanta, GA: Department of Education. 2011. Available at: [http://www.doe.k12.ga.us/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/GSHS-II/Documents/State%20Report\\_2010-2011.pdf](http://www.doe.k12.ga.us/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/GSHS-II/Documents/State%20Report_2010-2011.pdf). Accessed August 25, 2012

9. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. TEDS Report: Substance Abuse Treatment Admissions for Abuse of Benzodiazepines. 2011. Available at: [http://www.samhsa.gov/data/2k11/WEB\\_TEDS\\_028/WEB\\_TEDS-028\\_BenzoAdmissions\\_HTML.pdf](http://www.samhsa.gov/data/2k11/WEB_TEDS_028/WEB_TEDS-028_BenzoAdmissions_HTML.pdf). Accessed March 24, 2012.
10. Substance Abuse and Mental Health Services Administration. *TEDS 1999 - 2009. National Admissions to Substance Abuse Treatment Services*. Rockville, MD; 2011. Available at: <http://www.dasis.samhsa.gov/teds09/teds2k9nweb.pdf>. Accessed March 8, 2012.
11. Warner M, Chen L, Makuc D, Anderson R, Miniño A. Drug Poisoning Deaths in the United States, 1980–2008. Available at: [www.cdc.gov/nchs/data/databriefs/db81.pdf](http://www.cdc.gov/nchs/data/databriefs/db81.pdf). Accessed August 25, 2012.
12. Centers for Disease Control and Prevention. *Prescription Painkiller Overdoses Policy Impact Brief*. Home and Recreational Safety, Injury Center. Available at: <http://www.cdc.gov/homeandrecreationalafety/rxbrief/>. Accessed March 23, 2012.
13. Georgia Bureau of Investigations. *Deaths Related to Prescription Overdoses Continue to Rise*. 2011. Available at: [http://gbi.georgia.gov/00/press/detail/0,2668,67862954\\_67866877\\_173600626,00.html](http://gbi.georgia.gov/00/press/detail/0,2668,67862954_67866877_173600626,00.html). Accessed March 23, 2012.
14. Executive Office of the President of the United States of America. *Epidemic: Responding to American's Prescription Drug Abuse Crisis*. 2011. Available at: [http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/rx\\_abuse\\_plan.pdf](http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/rx_abuse_plan.pdf). Accessed March 8, 2012.
15. Just Think Twice. Available at: <http://www.justthinktwice.com/>. Accessed March 23, 2012.
16. Get Smart About Drugs. Available at: <http://www.getsmartaboutdrugs.com/default.html>. Accessed March 24, 2012.
17. The Drug-Take-Back Network. Available at: <http://www.takebacknetwork.com/index.html>. Accessed March 23, 2012.
18. Good Medicine, Bad Behavior: Drug Diversion in America. Available at: <http://www.goodmedicinebadbehavior.org/>. Accessed March 23, 2012.
19. US Government Accountability Office. *Prescription Pain Reliever Abuse: Agencies Have Begun Coordinating Education Efforts, but Need to Assess Effectiveness*. 2011. Available at: <http://www.gao.gov/assets/590/587301.pdf>. Accessed March 8, 2012.

20. Home | National Institute on Drug Abuse. Available at: <http://www.drugabuse.gov/>. Accessed March 23, 2012.
21. NIDA for Teens: About NIDA. Available at: <http://teens.drugabuse.gov/about.php>. Accessed March 23, 2012.
22. National Youth Anti-Drug Media Campaign | The White House. Available at: <http://www.whitehouse.gov/ondcp/anti-drug-media-campaign>. Accessed March 23, 2012.
23. NCPIE: National Council on Patient Information and Education. Available at: [http://www.talkaboutrx.org/not\\_worth\\_the\\_risk.jsp](http://www.talkaboutrx.org/not_worth_the_risk.jsp). Accessed March 23, 2012.
24. The American Medicine Chest Challenge. Available at: <http://www.americanmedicinechest.com/>. Accessed March 23, 2012.
25. Red Ribbon Week Activities and Information. Available at: <http://www.imdrugfree.com/>. Accessed March 23, 2012.
26. Maxey, J. 2012. Personal Communication. Telephone. August 10, 2012.
27. Narconon Announces New Prescription Drug Abuse Awareness Campaign. Available at: <http://www.prweb.com/releases/2011/7/prweb8648963.htm>. Accessed March 23, 2012.
28. Johnson J. 2012. Personal Communication. Telephone, March 19.
29. Polydorou S, Gunderson E, Levin F. *Training Physicians to Treat Substance Use Disorders*. *Curr Psychiatr Rep*. 2008; 10(5):399–404.
30. Isaacson J, Fleming M, Kraus M, Kahn R, Mundt M. *A national survey of training in substance use disorders in residency programs*. *J Stud Alcohol*. 2000; 61(6):912–915.
31. Information by Drug Class: Opioid Drugs and Risk Evaluation and Mitigation Strategies (REMS). Available at: <http://www.fda.gov/drugs/drugsafety/informationbydrugclass/ucm163647.htm>. Accessed March 23, 2012.
32. Screening, Brief Intervention, and Referral to Treatment (SBIRT). Available at: <http://www.samhsa.gov/prevention/sbirt/>. Accessed March 23, 2012.
33. Medical College of Georgia Admissions Office. 2012. Personal Communication. Telephone, March 10.

34. Mercer University Admissions Office, 2012. Personal communication. Personal Communication. Telephone, March 12.
35. S. 3397 (111th): Secure and Responsible Drug Disposal Act of 2010 - GovTrack.us. Available at: <http://www.govtrack.us/congress/bills/111/s3397>. Accessed March 23, 2012.
36. H.R, 2939 (112th): Pharmaceutical Stewardship Act of 2011 – GovTrack.us. Available at: <http://www.govtrack.us/congress/bills/112/hr2939>. Accessed March 20, 2012.
37. Consumer Updates : How to Dispose of Unused Medicines. Available at: <http://www.fda.gov/forconsumers/consumerupdates/ucm101653.htm#GuidelinesforDrugDisposal>. Accessed March 23, 2012.
38. Dozier, J. Personal Communication. Telephone, August 14, 2012
39. Drug Enforcement Administration Home. Available at: <http://www.justice.gov/dea/>. Accessed March 23, 2012.
40. SMARxT Disposal - Home Page. Available at: <http://www.smarxtdisposal.net/>. Accessed March 23, 2012.
41. The Drug-Take-Back Network. Available at: <http://www.takebacknetwork.com/index.html>. Accessed March 23, 2012.
42. Earth911.com - Find Recycling Centers and Learn How To Recycle. Available at: <http://earth911.com/>. Accessed March 23, 2012.
43. State Chapters NADDI of Georgia. Available at: [http://naddi.associationdatabase.com/laws/NADDI/pt/sp/about\\_chapters\\_GA](http://naddi.associationdatabase.com/laws/NADDI/pt/sp/about_chapters_GA). Accessed March 23, 2012.
44. Operation Medicine Drop Expands in Bulloch County | WSAV TV. Available at: <http://www2.wsav.com/news/2011/apr/21/operation-medicine-drop-expands-bulloch-county-ar-1746141/>. Accessed March 23, 2012.
45. Clayton County Water Authority News Releases. Available at: <http://www.ccwa1.com/community.information/news.releases.aspx?newsID=177>. Accessed March 23, 2012.
46. “Drug Terminator:” Citizens can dispose of old drugs at drop box outside Coweta jail. The Times-Herald. Available at: <http://www.times-herald.com/Local/Citizens-can-dispose-of-old-drugs---at-drop-box-outside-Coweta-jail---1873080>. Accessed March 23, 2012.

47. P2D2 News: Georgia P2D2 Disposal Box. Available at: [http://p2d2news.blogspot.com / 2010/08/georgia-p2d2-disposal-box.html](http://p2d2news.blogspot.com/2010/08/georgia-p2d2-disposal-box.html). Accessed March 23, 2012.
48. Thomaston, Georgia Police Department - Community/Government - Thomaston, GA | Facebook. Available at: <https://www.facebook.com/pages/Thomaston-Georgia-Police-Department/153699288004310>. Accessed March 23, 2012.
49. National Alliance for Model State Drug Laws. Compilation of State Prescription Monitoring Program Maps. Santa Fe, NM; 2011. Available at: <http://www.namsdl.org/documents/CompilationofPMPMaps03142012b.pdf>. Accessed March 28, 2012.
50. U.S Department of Justice Drug Enforcement Administration. *Questions & Answers - State Prescription Drug Monitoring Programs*. Available at: [http://www.deadiversion.usdoj.gov/faq/rx\\_monitor.htm](http://www.deadiversion.usdoj.gov/faq/rx_monitor.htm). Accessed March 23, 2012.
51. U.S Department of Justice Drug Enforcement Administration. *Questions & Answers - State Prescription Drug Monitoring Programs*. Available at: [http://www.deadiversion.usdoj.gov/faq/rx\\_monitor.htm#3](http://www.deadiversion.usdoj.gov/faq/rx_monitor.htm#3). Accessed August 25, 2012.
52. Katz N, Panas L, Kim M, Audet AD, Bilansky A, Eadie J, Kreiner P, Paillard FC, Thomas C, Carrow G. *Usefulness of prescription monitoring programs for surveillance—analysis of Schedule II opioid prescription data in Massachusetts, 1996-2006*. *Pharmacoepidemiol Drug Saf.* 2010 Feb; 19(2): 115-23. Available at: [www.ncbi.nlm.nih.gov/pubmed/20014166](http://www.ncbi.nlm.nih.gov/pubmed/20014166). Accessed August 25, 2012.
53. Baehren D, Marco C, Droz D. *A statewide prescription monitoring program affects emergency department prescribing behaviors*. *Ann Emerg Medicine.* 2010; 56(1):19–23.e1–3.
54. Office of National Drug Control Policy. *Prescription drug monitoring programs fact sheet*. Available at: [www.whitehouse.gov/sites/default/files/ondcp/Fact\\_Sheets/pdmp\\_fact\\_sheet\\_4-8-11.pdf](http://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/pdmp_fact_sheet_4-8-11.pdf). Retrieved August 25, 2012.
55. Paulozzi L, Kilbourne E, Desai H. *Prescription drug monitoring programs and death rates from drug overdose*. *Pain Medicine.* 2011;12(5):747–754.
56. Kerlikowske G, Jones C, Labelle R, Condon T. *Prescription drug monitoring programs-lack of effectiveness or a call to action?* *Pain Medicine.* 2011; 12(5):687–689.
57. Senate Bill 36. Available at: [http://www1.legis.ga.gov/legis/2011\\_12/pdf/sb36.pdf](http://www1.legis.ga.gov/legis/2011_12/pdf/sb36.pdf). Accessed March 23, 2012.

58. Prescription Monitoring Information Exchange (PMIX) | *The alliance of states with prescription monitoring programs*. Available at: <http://www.pmpalliance.org/content/prescription-monitoring-information-exchange-pmix>. Accessed March 23, 2012.
59. Brandis University. *Prescription drug monitoring programs: promising practices to maximize their effectiveness*. Available at: [http://www.nga.org/files/live/sites/NGA/files/pdf/1109CJ\\_PAKREINER.PDF](http://www.nga.org/files/live/sites/NGA/files/pdf/1109CJ_PAKREINER.PDF). Accessed March 23, 2012.
60. Department of Health and Human Services, National Institute on Drug Abuse Research *Report Series* October, 2011. Available at: [www.drugabuse.gov/sites/default/files/rrprescription.pdf](http://www.drugabuse.gov/sites/default/files/rrprescription.pdf). Accessed August 25, 2012.
61. Rigg K, March S, Inciardi J. *Prescription Drug Abuse & Diversion: Role of the Pain Clinic*. *J Drug Issues*. 2010; 40(3):681–702.
62. Centers for Disease Control and Prevention. Home and Recreational Safety. Doctor Shopping-State Rx Dug Laws. Available at: [www.cdc.gov/homeandrecreationalafety/Poisoning.laws/dr\\_shopping.html](http://www.cdc.gov/homeandrecreationalafety/Poisoning.laws/dr_shopping.html). Accessed August 25, 2012
63. Centers for Disease Control and Prevention. Home and Recreational Safety. Laws by State-State Rx Drug Laws. Available at: [www.cdc.gov/homeandrecreationalafety/Poisoning/laws/laws.html](http://www.cdc.gov/homeandrecreationalafety/Poisoning/laws/laws.html)63. Accessed August 25, 2012.
64. S. 1760: Pill Mill Crackdown Act of 2011. Available at: <http://www.govtrack.us/congress/bills/112/s1760>. Accessed March 23, 2012.
65. Atlanta Journal Constitution. Georgia trying to control pill mills: pain clinics are surging in Georgia, where drug overdose deaths are rising. November 20, 2011. Available at: [www.ajc.com/new/georgia-trying-to-control-1233110.html](http://www.ajc.com/new/georgia-trying-to-control-1233110.html). Accessed August 25, 2012.
66. Executive Office of the President of the United States. *Georgia Drug Control Update*. Available at: [http://www.whitehouse.gov/sites/default/files/docs/state\\_profile\\_-\\_georgia.pdf](http://www.whitehouse.gov/sites/default/files/docs/state_profile_-_georgia.pdf). Accessed August 25, 2012.
67. Georgia Drugs & Narcotics Agency: *What We Provide*. Available at: [http://gdna.georgia.gov/00/createdate/0,2095,132319894\\_132802228,00.html](http://gdna.georgia.gov/00/createdate/0,2095,132319894_132802228,00.html). Accessed March 23, 2012.
68. National Association of Drug Diversion Investigators. Available at: [http://associationdatabase.com/aws/NADDI/pt/sp/about\\_chapters\\_GA](http://associationdatabase.com/aws/NADDI/pt/sp/about_chapters_GA). Accessed March 23, 2012.

69. 2010 Georgia Code § 16-13-1 -Drug related objects: Available at: <http://law.justia.com/codes/georgia/2010/title-16/chapter-13/article-1/16-13-1/>. Accessed March 23, 2012. Accessed March 23, 2012.