An Assessment of Prescription Drug Abuse, Underage Drinking, and Georgia's Prescription Drug Monitoring Program

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EXECUTIVE SUMMARY

This assessment was commissioned by DBHDD, OBHP to initiate the "Georgia Strategic Prevention Framework Rx (SPF-Rx)" Project funded by SAMHSA. Findings are being used in creation of a four-year strategic plan. The assessment explored:

1. ***The prevalence of <u>prescription</u> opioid, sedative, and stimulant drug abuse and misuse*** across Georgia, including identification of five "high need" areas;
2. ***The prevalence of underage drinking*** across Georgia; and
3. ***Perceptions of Georgia's Prescription Drug Monitoring Program (PDMP)*** by prescribers (e.g., physicians, physician assistants, nurse practitioners, dentists, veterinarianseer), dispensers (i.e., pharmacists), and prescriber/dispenser delegates (i.e., medical and pharmacy technicians).

Brief Overview of Drug Abuse in the U.S. and Georgia. Over 52,000 people in the U.S. died from drug overdoses in 2015, which for the first time was more than from car crashes. Deaths steadily increased from 12.3 deaths per 100,000 individuals in 2010 to 16.3 in 2015. Georgia also had significant increases in drug overdose deaths with 11.1 deaths per 100,000 individuals in 2010 to 12.8 in 2015. Almost two-thirds of the overdose deaths in Georgia involved opioids/opiates, with sedatives and stimulants also often involved.

Prevalence Findings from the Assessment. Nine relevant databases were identified, five of which were obtained and analyzed with findings included in this report (see below.) PDMP, treatment episode, and hospital and emergency room discharge diagnosis data exist but were unavailable. It is strongly recommended that these four highly relevant databases be included in future analyses since the five databases examined present an incomplete picture of prescription drug consumption in Georgia. Further, the complex links between prescription and non-prescription substances – such as heroin, marijuana, alcohol and tobacco – were beyond the scope of this study. Following is a summary of findings from the databases examined:

- The ***Georgia Student Health Survey (GSHS)*** is administered to a substantial statewide sample of students in grades 3 through 12. Data on students from grades 8 through 11 were analyzed as a proxy for 14 to 17 year old age group of interest to SAMHSA. From 2015 to 2016 (the only two years for which "painkiller" use data were available) the rates declined for all three drug groups, though only very slightly for painkillers and stimulants, and negligibly for sedatives.

- The ***National Poisoning Data System (NPDS)*** contains data about poisonings from dozens of substances, including prescription drugs. The statewide rates for prescription opiates, sedatives and stimulants from 2012 to 2016 for persons aged 12 to 25 varied little from year to year, with slight increases for opiates and sedatives over the five years. The rate for "any poisonings" did increase markedly from 2015 to 2016.

- The ***Medical Examiners Drug Overdose Database*** contains data about drugs involved in overdose deaths. Due to irregularities across and within counties in how autopsies are conducted and data are recorded, only statewide, cumulative findings from 2014 through 2016 are presented. Opiates accounted for the largest proportion (44% of 1,500 deaths,) followed by depressants (28%,) "other" prescription drugs (20%,) and stimulants (8%.) An average of 2.8 different substances per death was noted, suggesting that multiple substances across drug categories is the norm. Middle-aged, white males was the largest demographic group among decedents.

- The ***National Seizure System*** is a compendium of seizure information regarding drugs, weapons, chemicals, currency, and clandestine laboratory seizures. The data reflect trafficking routes and law enforcement priorities and practices at least as much as the true nature of contraband actually being consumed in a given area. Two factors in particular, the presence of an interstate highway and specific interdiction efforts, appear to impact seizure rates. Georgia counties with the most seizures from 2014 through 2016 cumulatively were predominantly in metropolitan Atlanta. Exceptions were smaller counties bisected by major interstates, on borders, and where Multijurisdictional Drug Task Forces were located.

Identification of High Need Areas from the Assessment. Data from the ***GSHS*** and ***NPDS*** were used to identify high need areas in Georgia. Each county was ranked from 1 (worst) to 159 (best) based on 12 variables: GSHS painkiller, sedative and stimulant use in 2016 (3 variables) and change from 2015 to 2016 (3 variables;) and NPDS opioid, sedative and stimulant poisonings in 2016 (3 variables) and change from 2012 to 2016 (3 variables.) An average rank across all 12 variables for each county was then computed. Complete findings for all counties, including apparent multi-county clusters, are included in the full report.

Underage Drinking Findings from the Assessment. Three databases were examined to determine the prevalence of underage drinking in Georgia:

- ***GSHS***: Statewide in 2016, 9.9% of students reported drinking alcohol during the past 30 days. Reported alcohol use dropped statewide by 10.9 percentage points from 2012 to 2016. This represents a 55.5% decrease over this four-year span.

- ***NPDS***: The statewide rate of reported ethanol poisoning cases in 2015 (per 10,000 persons ages 12-25) was 0.5. The statewide change in this rate from 2012 to 2015 was 0.1.

- ***Computerized Criminal History***: This database provides information about individuals aged 17 through 20 years arrested for the crime of "Furnishing, Purchasing, and Possession of Alcoholic Beverages by Persons below Legal Age." There were 10,521 arrests for this charge statewide from 2014 through 2016. This offense appears closely tied to the presence of colleges and universities. The top ten counties, each of which has a college or university, account for half of all arrests statewide over the three years examined.

PDMP Findings from the Assessment. Structured interviews, approximately one hour in length, with the same set of core questions but slight variations among different user groups, were conducted by phone with 69 PDMP users. Fifteen surveys were completed by those with whom an interview could not be arranged. One pharmacist focus group was also conducted. Respondents included 19 physicians, 17 pharmacists, 14 nurse practitioners, 14 physician assistants, 9 dentists/oral surgeons, 8 veterinarians, 1 medical technician, and 4 pharmacy technicians. Though this was not a rigorously representative sample, efforts were made to ensure that interviewees came from a variety of geographic regions, professional specialties, and practice settings.

Respondents were asked to discuss their opinions about awareness of the PDMP, ease of access to and navigation through it, and usefulness of the information in it. They were also asked about each specific 2016 and 2017 PDMP legislation change, as well as several PDMP features from other states not currently included in Georgia. Findings were sorted along two dimensions – *rating of effectiveness* (high, moderate, low) and *degree of agreement* (high, moderate, low) – among four respondent groups: (1) physicians, (2) pharmacists, (3) nurse practitioners and physician assistants, and (4) dentists and veterinarians. Following are key findings:

- Across **all respondent groups** these current PDMP features and legislation changes were rated highly effective: interoperability across state lines (though serious functionality problems were noted as remaining,) requiring DPH to randomly check the PDMP for accuracy, allowing researchers to access PDMP data, the usefulness of information in the PDMP, and requiring dispensers to record information within 24 hours. There was uniform low support for allowing certified law enforcement officers to access the PDMP.

- *Physicians, pharmacists, and nurse practitioners/physician assistants* said they sometimes run inquiries into the PDMP while *dentists and vets* said they rarely or never do.

- Among the four groups, *physicians* voiced the least average support for specific PDMP features/legislation. They also disagreed most among themselves. They did support most existing features but not most potential new features, except mandatory dispenser inquiries before dispensing. They generally recognized the value of running PDMP inquiries but had practical concerns about recent legislation making it mandatory for themselves.

- *Pharmacists, dentists, and vets* voiced slightly higher average support for most PDMP features/legislation. They too tended to support existing and recently legislated features more than other potential new features. Pharmacists were second only to physicians in disagreeing among themselves about PDMP features, though they mostly supported (with two exceptions) and agreed on 2015 and 2016 legislation, as did dentists and vets.

- Among the four groups, ***nurse practitioners/physician assistants*** voiced the highest average support for and agreement about current and potential new PDMP features, notably for adding information about Naloxone use and risky patient behaviors to the PDMP. This implies that for this group, the more information the better. There was moderate disagreement about making inquiries mandatory for prescribers and dispensers.

REPORT SUMMARY

This assessment was commissioned by the Georgia Department of Behavioral Health and Developmental Disabilities (DBHDD), Office of Behavioral Health Prevention (OBHP) as part of the first phase of the "Georgia Strategic Prevention Framework Rx (SPF-Rx)" project funded by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). Findings will be used to inform creation of the SPF-Rx strategic plan for the five-year project by October 31, 2017.

The assessment was designed primarily to explore two crucial aspects of Georgia's prescription drug abuse and misuse epidemic:
1. ***The prevalence of prescription opioid, sedative, and stimulant drug abuse and misuse*** across Georgia's 159 counties, with particular attention to "high need" geographic areas.
2. ***The perceptions of Georgia's Prescription Drug Monitoring Program (PDMP)*** by prescribers (e.g., physicians, dentists, nurse practitioners, midwives, physician assistants, veterinarians), dispensers (i.e., pharmacists), and prescriber/dispenser delegates (e.g., medical technicians, pharmacy technicians).

Some of the same databases used to explore prescription drug abuse and misuse, and one other database, were also examined to assess ***underage drinking in Georgia***, another critical behavioral health issue being addressed by OBHP.

OVERVIEW OF PRESCRIPTION DRUG ABUSE AND PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs)

Opioid, Sedative and Stimulant Drug Abuse in the U.S. and Georgia

More individuals are killed by drug overdoses than motor vehicle accidents. In 2015, 52,404 individuals died in the U.S. from drug overdoses. U.S. drug overdose deaths are steadily increasing, with 12.3 deaths per 100,000 individuals in 2010 to 16.3 in 2015. Georgia also had large increases in drug overdose deaths during this time with 11.1 deaths per 100,000 individuals in 2010 to 12.8 in 2015. From 2010 to 2014, data from the National Vital Statistics System reveal that the drugs most frequently involved in drug overdose deaths included the opioids: heroin, oxycodone, methadone, morphine, hydrocodone, and fentanyl; the benzodiazepines: alprazolam and diazepam; and the stimulants: cocaine and methamphetamine.

Information from the National Surveys on Drug Use and Health, Youth Risk Behavior Survey (Substance Abuse and Mental Health Services Administration, 2015b) indicates

that Georgia's percentages of cocaine and heroin use and alcohol dependence were consistent with national percentages among ages 12-17 and 18 and older. In 2013-2014, of youth ages 12-17, 8.4% in Georgia and 9.1% in the United States reported using illicit drugs in the month prior to being surveyed (Substance Abuse and Mental Health Services Administration, 2015a).

In 2013-2014, of youth ages 12-17, 5.2% in Georgia and 4.7% in the United States reported nonmedical use of pain relievers in the past year (Substance Abuse and Mental Health Services Administration, 2015a). In 2013-2014, of youth ages 12-20, 12.1% in Georgia and 14.0% in the United States reported binge alcohol use in the month prior to being surveyed (Substance Abuse and Mental Health Services Administration, 2015a).

PDMP Practices in the U.S. and Georgia

The Centers for Disease Control and Prevention argues for the importance of using Prescription Drug Monitoring Programs (PDMPs) to reduce illegal access to controlled substances – such as opioids, stimulants, and depressants – and to ensure appropriate levels and combinations of prescriptions (Centers for Disease Control and Prevention, 2016b). PDMPs can help identify "prescription fraud, forgeries, doctor shopping, and improper prescribing and dispensing" (Prescription Drug Monitoring Program Center of Excellence at Brandeis, 2014); help identify medication errors from valid prescriptions prescribed by multiple prescribers; monitor the effectiveness of interventions and legislation aimed at preventing drug overdoses; facilitate criminal investigations by decreasing the effort required by law enforcement to inspect drug diversion cases (United States General Accounting Office, 2002); and may also serve as a deterrent to potential doctor shopping if individuals suspect their doctors will check the PDMP. PDMPs have been shown to decrease the supply of prescription pain relievers and stimulants, thereby decreasing the potential for abuse (Simeone & Holland, 2006).

The Georgia PDMP is a stand-alone system accessed online. It is not currently integrated into other electronic health record systems. The streamlined registration process is completed online. The following individuals may register and request data from Georgia's PDMP (Prescription Drug Monitoring Program Training and Technical Assistance Center, 2016b):
- Healthcare professional prescribers (including physicians, physician assistants, nurse practitioners/clinical nurse specialists, dentists, optometrists, podiatrists, qualified medical residents and midwifes) and prescriber delegates;
- Dispensers (pharmacists) and dispenser delegates (licensed pharmacy technicians);

- Law enforcement (federal, state, and local) and prosecutors with proper authorization; licensing boards;
- Medicaid Fraud and Abuse staff; and
- Medicaid Drug Utilization and Review staff.

Beginning July 1, 2016, (1) prescriber delegates (licensed staff) and pharmacist delegates (licensed pharmacist technicians) were allowed access to the PDMP and (2) PDMP data began being kept and monitored over the course of two years (previously only one year), among other changes. Beginning this year (1) all dispensers (pharmacies and dispensing prescribers) are mandated to submit information into Georgia's PDMP for dispensed Schedule II, III, IV, and V controlled substance prescriptions within 24 hours (previously 10 days) after the substance is dispensed; (2) all prescribers are mandated, under certain conditions, to check the PDMP prior to prescribing Schedule II, III, IV, or V substance; (3) Georgia's PDMP will be housed with Georgia's Department of Public Health (DPH); and (4) DPH is mandated to test the PDMP randomly "to determine if it is accessible and operational 99.5 percent of the time;" among other changes.

PRECRIPTION DRUG ABUSE AND MISUSE, PREVALENCE AND TRENDS IN GEORGIA

The assessment team attended several professional meetings (e.g., the "Heroin Working Group," the Substance Abuse Research Alliance, the Georgia Prescription Drug Abuse Prevention Initiative Collaborative, and the State Epidemiological Outcomes Workgroup) and interviewed several recognized experts to identify databases containing recent, Georgia county information on prescription drug abuse and misuse. Nine databases were eventually identified, five of which were obtained and analyzed with findings included in this report: (1) Georgia Student Health Survey, (2) National Poisoning Data System, (3) Medical Examiners Drug Overdose data, (4) National Seizure System, and (5) Computerized Criminal History. The PDMP database yielded limited findings that are included briefly in this report.

Three other relevant datasets were unavailable in time for inclusion in this analysis: (1) hospital discharge diagnosis data, (2) emergency room visit discharge diagnosis data; and (3) treatment episode data, including information about alcohol and drug treatment services delivered by DBHDD facilities. **It is strongly recommended that these data be included in future analyses.**

An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

Georgia Student Health Survey

The Georgia Student Health Survey (GSHS) is administered statewide by the Georgia Department of Education to students in grades three through 12. This survey is available to public and private schools. Each student in the dataset is identified with a specific school, and each school is linked with a specific county. For middle- and high-schoolers, GSHS questions include measures of past 30-day alcohol and drug use. Age is missing for all years; so, only data on students from 8th to 11th grades were used in this analysis as a proxy for 14- to 17-year-old age group of interest.

The statewide rates of reported prescription drug use by students are depicted in the table below. From 2015 to 2016, the only two years for which "painkiller" use data were available, the rates dropped for all three drugs examined, though negligibly for tranquilizers/sedatives and slightly for painkillers and stimulants.

	2015	2016	Change From 2015 to 2016
Prescription painkillers	2.50%	2.06%	-0.44%
Prescription stimulants	1.48%	1.21%	-0.27%
Prescription tranquilizers/sedatives	1.52%	1.49%	-0.03%

In 2016 statewide, for all drug types examined, the highest percentages of reported users were 'other," followed in descending order by White, Hispanic/Latino, Black and Asian/Pacific Islander (see the table below). From 2015 to 2016, reported use showed small declines among all races for all three substances, except for a miniscule increase in tranquilizer/sedative use among Blacks. Painkiller use showed decline across all races. (See the table below.)

	Black	Hispanic/Latino	White	Asian/Pacific Islander	Other
Rx Painkiller %	-0.32	-0.34	-0.48	-0.59	-0.89
Rx Tranquilizer/sedative %	0.14	-0.03	-0.12	-0.44	-0.08
Rx Stimulant %	-0.10	-0.22	-0.38	-0.42	-0.29

National Poisoning Data System

The National Poisoning Data System (NPDS) compiles data from American Association of Poison Control Centers (AAPCC). The NPDS was established in 1983. Its data

collection and reporting techniques have been refined and standardized over time and are known as relatively reliable. The statewide rates of poisoning cases from 2012 to 2016 per 10,000 persons ages 12-25 are depicted in the table below. These rates varied slightly from year to year but remained relatively flat overall until 2016, when the overall "any poisoning" rate increased.

	2012	2013	2014	2015	2016	Change From 2012 to 2016
Any Poisonings	8.4	8.6	8.7	8.6	9.4	1.0
Opiate Poisonings	1.0	1.3	1.0	0.9	1.2	0.2
Tranquilizer/Sedative Poisonings	3.7	3.5	3.9	3.9	4.0	0.3
Stimulant Poisonings	1.0	1.3	1.3	1.0	1.0	< 0.1

Medical Examiners Drug Overdose Database

Medical Examiner (ME) data was examined for the three years from 2014 through 2016. These data consisted of poisoning deaths due to one or more drugs discovered upon review of toxicology reports. Several serious flaws were identified in the data, primarily (1) variations in data and data recording methods across individual medical examiners, counties, and time; and (2) variations in how toxicology is characterized and reported (e.g., some medical examiners attributed deaths generally, to multiple substances or to the toxic effects of opiates, while others document every chemical compound present in the toxicology report.) For these reasons, only limited statewide findings are provided.

The presence of prescription drugs was found on toxicology reports in the highest raw numbers within the metropolitan Atlanta area. Statewide, approximately 1,500 deaths evidenced the presence of one or more prescription drugs on toxicology results. Prescription opiates accounted for the largest proportion, being present in 44% of these cases. This was followed by prescription depressants at 28%, other prescription drugs at 20%, and stimulants at just under 8%. The presence of depressants, often referred to as sedatives and including the class of drugs known as benzodiazepines, has historically been responsible for a great many prescription drug overdoses, specifically when taken with alcohol (Jones, Paulozzi, & Mack, 2014). These findings echo trends in Georgia and the rest of the United States.

The most striking finding is the frequency of death related to polysubstance abuse. For example, of the 93 prescription and illicit drug-related deaths in one metropolitan Atlanta county in 2014, only four were the result of single as opposed to multiple drug toxicity. Of these four, three also tested positive for alcohol. The average number of drugs

(prescription or illicit) identified through toxicology in this same sample was 2.8 per individual. These individuals were also combining drugs across a great number of categories and classes, with toxicology results often noting the presence of opiates, Central Nervous System (CNS) stimulants, CNS depressants, and alcohol at post mortem. The data suggest that death due to multiple drug toxicities and use of a wide range of substances across drug categories is more the norm than the exception.

National Seizure System

The National Seizure System (NSS) is a compendium of seizure information regarding drugs, weapons, chemicals, currency, and clandestine laboratory seizures. The NSS is managed by the Drug Enforcement Administration's El Paso Information Center (EPIC). Seizure data is reported to EPIC by federal, state, and local law enforcement agencies

While this dataset contains a great deal of information on seizure of not only drugs but on other items as well, it reflects local, national, and even international trends in drug trafficking as well as focused interdiction efforts. As a result, the data may reflect law enforcement priorities and practices rather than the true nature of what and how much contraband is actually being trafficked. Finally, trafficking and law enforcement patterns impact seizure rates. Two factors in particular, the presence of an interstate highway and specific interdiction efforts (e.g., Multijurisdictional Drug Task Forces) potentially impact seizure rates as well.

NSS data analyzed for the purposes of this report consisted of records of drug seizures that occurred in Georgia from 2014 through 2016 and are reported cumulatively for this three-year period. While the counties with the most overall raw seizure numbers are predominantly metropolitan Atlanta counties, Whitfield and Carroll counties are notable exceptions. Both counties are, however, bisected by major interstates (I-75 and I-20, respectively) and both share a border with an adjacent state (Tennessee and Alabama, respectively).

Georgia PDMP

Much of the PDMP data at the county level were not available for analysis and inclusion in this report. The one variable set provided was related to opioid/opiate "narcotic" prescriptions dispensed in each Georgia county from July 1, 2015 through June 30, 2016. Included in this dataset were the total number of opioid/opiate prescriptions recorded in the PDMP as dispensed and the ratio of prescriptions per person based on the county's 2016 population. County ranks are depicted in the report body.

High Need Areas

As mentioned in the overall introduction, this assessment was commissioned by DBHDD, OBHP as part of the first phase of the "Georgia Strategic Prevention Framework Rx (SPF Rx)" project. Findings will be used to inform the creation of the SPF-Rx strategic plan for the five-year project by October 31, 2017. The strategic plan will feature five "high need" geographic areas in Georgia where the SPF-Rx will be implemented over the four remaining grant years. This assessment was commissioned, in part, to assist with identification of the five areas.

Two of the databases featured earlier in this report were selected for inclusion in this analysis, primarily on the criterion that of all available data they contain the most valid indications of where in Georgia prescription drugs are recently being abused and misused. They are the Georgia Student Health Survey and the National Poisoning System data. The following datasets were considered but eventually rejected due to prohibitive concerns about criterion validity: Medical Examiner Drug Overdose data, National Drug Seizure System data, and Computerized Criminal History data.

Other datasets would likely meet the criterion but the specific variables required for analysis could not be obtained in time: hospital discharge data, emergency room visit discharge data, and DBHDD treatment episode data. **It is strongly recommended as soon as these datasets become available that all data meeting the criterion be re-analyzed, preferably before a final strategic plan is created for the Georgia Strategic Prevention Framework Rx Project and the state is committed to implementation in five specific communities.**

Rates instead of total numbers were used in analysis so that all Georgia counties would be considered. (Using total numbers would heavily weight populous, urban counties.) Twelve variables related to opiates/painkillers, tranquilizers/sedatives, and stimulant use for the most recent year and change from the first available year the most recent year were included in analysis. Every county was then ranked from 1 to 159 for each of these 12 variables. An average of the twelve rank scores was then calculated to produce the final composite rankings.

The number 1 represents the worst rank (i.e., Ben Hill, with a composite rank of 25.9 across the 12 indicators) and 159 represents the best rank. The counties with the worst average ranks are listed below:

High Need Areas County	
1. Ben Hill	25.9
2. Colquitt	28.1
3. Pickens	38.2
4. Bryan	40.0
5. Putnam	43.0
6. Coweta	44.3
7. Franklin	45.2
8. Paulding	46.6
9. Sumter	47.5
10. Cherokee	48.1

Three databases were examined to determine the prevalence of underage drinking in Georgia: The Georgia Student Health Survey, The National Poisoning Data System, and The Computerized Criminal History System.

As stated in the "Prescription Drug Abuse and Misuse, Prevalence and Trends in Georgia" section of this report, **hospital and emergency room visit discharge data, and possibly treatment episode data, would be valuable additions to this analysis. It is strongly recommended that these databases be included as they become available for future analyses.**

Georgia Student Health Survey

According to NSDUH data, reported alcohol use among youth ages 12 – 17 during the past 30 days decreased 3.7 percentage points from 12.9% in 2012 (Substance Abuse and Mental Health Services Administration, 2014) to 9.2% in 2016 (National Institutes of Health, 2017). Statewide in 2016, 9.9% of students reported drinking alcohol during the past 30 days. Reported alcohol use dropped statewide by 10.9 percentage points from 2012 (20.77%) to 2016 (9.87%). This represents a 55.5% decrease over this four-year span. Only four counties had increases in percentage of reported alcohol users.

In 2016 statewide, the most use was reported by "Other," following in descending order by White, Hispanic/Latino, Black and Asian/Pacific Islander. From 2012 to 2016 statewide, reported use decreased for all races, with the biggest decreases for "other" and Hispanic/Latino.

National Poisoning Data System

The statewide rate of reported ethanol poisoning cases in 2015 (per 10,000 persons ages 12-25) was 0.5. The statewide change in this rate from 2012 to 2015 was 0.1.

Computerized Criminal History Database

The Computerized Criminal History (CCH) system was searched as a means of identifying criminal offenses related to underage drinking. In Georgia, a person reaches the age of criminal responsibility at the age of 17 years. Therefore, this dataset (with the exception of very serious offenses for which a minor was charged as an adult) contains offense information for persons aged 17 and older, meaning data relevant to this study are for individuals aged 17 through 20 years. Given the large number of counties in Georgia, the only charge that occurred with sufficient frequency for analytic purposes

was "Furnishing, Purchasing, and Possession of Alcoholic Beverages by Persons Below Legal Age." There were 10,521 arrests for this charge statewide from 2014 through 2016.

This offense was found to be very closely tied to the presence of one or more colleges/universities in the county. The top ten counties together account for fully half of all incidents of this charge over the 2014 through 2016 period. Furthermore, those charged are predominantly white males. When sorting the data by year and according to incidence rate (arrests for this offense per 100,000 persons), the pattern of findings is less clear than the link between the charge and the presence of one or more colleges/universities in the county.

PDMP PRESCRIBER, DISPENSER AND DELEGATE INTERVIEWS AND FOCUS GROUPS

Interviews, surveys, and one focus group were conducted from March to June 2017 with Georgia PDMP "users," including dispensers (i.e., pharmacists), prescribers (i.e., physicians, dentists, veterinarians, physician assistants, nurse practitioners) and medical/pharmacy technicians, known as "delegates" in terms of PDMP use. The purpose of the interviews, surveys, and focus group was to hear from PDMP users about what works well, what does not work well, what would make the system work better, and to get their opinions about PDMP features from other states not currently included in the Georgia PDMP.

Methods

Structured interviews, approximately one hour in length, with the same set of core questions but slight variations among different user groups, were conducted by phone with 69 PDMP users. Candidates who were not able to schedule an interview were invited to complete an online survey version of the interview. Fifteen surveys were completed. Respondent comments from these interviews, surveys, and one pharmacist focus group were recorded narratively and content analyzed.

Given the short timeframe for and limited resources allocated to the assessment process, it was not possible to sample rigorously to ensure thorough representation within each PDMP user group. Efforts were made, however, to ensure that interviewees came from a variety of geographic regions, professional specialties, and practice settings.

Comparison of Findings across Groups

For most questions about PDMP functionality, recent legislation changes, and potential new features, respondents were asked to rate their approval or support on a one-to-five scale with one being worst and five being best. Given the volume of issues posed in these interviews, focus groups, and surveys and the variety of opinions among respondents, the following information is presented to summarize, compare, and contrast opinions within and among the groups: The four groups are pharmacists and pharmacy technicians; physicians and medical technicians; physician assistants and nurse practitioners; and dentists and veterinarians. The findings presented below are also presented in Tables 5 and 6.

PDMP features with high approval or support
Several existing PDMP features had *high approval or support across* all or most groups, including:
- The effectiveness of *PDMP interoperability* across state lines. There was also consensus within and among the four groups for this feature;
- The effectiveness of *requiring DPH to check the PDMP randomly*. There was consensus within and among the four groups for this feature (though the question was not asked of pharmacists because they were interviewed before the legislation was passed);
- The effectiveness of *allowing researchers to access PDMP data*. There was near consensus within and among groups for this feature, with physicians agreeing only moderately among themselves;
- The *usefulness of information in the PDMP*. There was near consensus within and among groups for this feature, with only dentists and veterinarians rating it in the moderate range and only pharmacists agreeing moderately among themselves; and
- The effectiveness of *requiring dispensers to record within 24 hours*. There was near consensus within and among groups for this feature, with only dentists and veterinarians rating it in the moderate range and nurse practitioners and physician assistants, and dentists and vets agreeing moderately among themselves.

PDMP feature with low support
One potential PDMP feature had low support across most groups:
- *Allowing certified law enforcement officers to access the PDMP*. There was near consensus within and among groups for this feature, with only pharmacists rating it in the moderate range and only nurse practitioners and physician assistants agreeing moderately among themselves.

Other patterns among the four groups
Other notable response patterns among the four groups include:

- Physicians, pharmacists, nurse practitioners, and physician assistants all said they sometimes run inquiries in the PDMP; while dentists and veterinarians said they rarely or never do;
- Physicians tended to voice the lowest support for the 17 PDMP features or potential features queried, registering low approval or support for 6 of the 17. At the same time, they voiced high approval or support for 8 of the 17 features, second most among the four groups. Physician support was highest for existing or newly-legislated features, with the exception of mandatory inquiries for themselves before prescribing. Support was lowest for other potential features, with the exception of mandatory dispenser inquiries to the PDMP before dispensing;
- Among all groups there was generally moderate or high agreement for existing PDMP features and low agreement for other potential features. This was especially true of physicians, implying a lack of consensus among professionals about these potential features;
- Pharmacists, dentists, and veterinarians typically voiced moderate support for most PDMP features. They tended to approve of or support existing and recently legislated features more than other potential features.
- Pharmacists were second only to physicians in disagreeing among themselves about PDMP features, though they tended to agree on most features legislated in 2016, as did dentists and veterinarians;
- Nurse practitioners and physician assistants voiced high approval or support for 10 of the features and at least moderate support for all but one of the other features; the highest overall approval or support for the 17 features among the four groups. This implies that for this group, the more information the better. The main item about which there was significant disagreement among members of this group was making inquiries mandatory for prescribers and dispensers. As with other groups, there was most support and agreement for features legislated in 2016; and
- There was low to moderate overall support for adding other potential features to the PDMP. However, physicians were highly supportive of requiring dispensers to run inquiries before dispensing, and nurse practitioners and physician assistants were highly supportive of adding Naloxone use and information about patients who acquire drugs in risky ways to the PDMP.

Recommendations across Groups

In addition to the "recommendations" implicit in respondents' support for recent legislation and potential new features (summarized above), they also suggested several other PDMP features and related policies to improve PDMP usefulness. They are presented by group below so they can be compared and considered together.

Pharmacists' Opinions about Access and Navigation

- Integrate pharmacy software and the PDMP so dispensing information is updated automatically. This would allow access to essentially real-time data, reducing the workload burden and the potential for data entry error.
- Improve the way patient names are entered into the PDMP. One pharmacist suggested the name search should be by last name and patient birthdate. Another suggested having the home screen start with the patient name search and last medication prescribed. Another said,

  > *[One] of the things that makes the PDMP difficult is that patient names have to be entered completely. There is no legal name requirement so patients can be entered multiple ways; for example, women who get married and have two names or hyphenate; or Hispanic families who have multiple names…The data in the PDMP is limited to how accurate that data was entered. The doctor may write the script one way and insurance won't pay because the name doesn't match their information. If people had an identifier, a number or something, like a driver's license or some other number, that would help. I think some states have done that. This would help us locate them in the system.*

- Have the ability to conduct a bulk search, automatic searches, or multiple ways to look up patients.
- Have the ability to highlight and search for specific medications.
- Speed up access to critical information by reducing the number of "clicks" required. One suggested having a "narcotics" button that goes straight to the critical information.

Pharmacists' Opinions about Content

- Have an automatic calculator that determines if it is time to fill a prescription.
- Include other medications that are not currently scheduled as a controlled substance, such as Gabapentin, which is used to accentuate narcotic effects.
- Have information about whether patients are being treated for a chronic or acute condition.
- Have the ICD code the physician's office uses for billing.
- List the pharmacy and physician phone numbers.

Pharmacists' Opinions about Regulations, Resources and Responsibilities

- Limit the quantity of narcotics that prescribers are allowed to prescribe, depending on various conditions and situations.
- Provide more education for PDMP users.

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- Have qualified people manage and more resources to support the PDMP, especially for monitoring and enforcement purposes. One pharmacist said,

  > *I am concerned about tracking. How will you know if the doctor did it [checked the PDMP]? I have become a police person and that is not what I am here for. When they first started talking about this, the doctors weren't going to be fined but we were.*

- Ensure that responsibility is shared between pharmacists and physicians for using and updating the PDMP. Some pharmacists were doubtful physicians would use the PDMP, even if required, and others noted that doctors are typically slow to respond to pharmacist calls. One complained that he had been asked by a doctor to look things up in the PDMP for him. Despite these issues many were emphatic that such communications are critical to detecting, confirming, and dealing with suspected abuse and misuse. One explained that prior to the PDMP he could not contact doctors to ask questions or discuss perceived problems. As another explained,

  > *It's better, definitely better to be able to speak about what we see, especially with ER docs who don't have time to go into the PDMP. It comes down to pharmacists policing drug-seeking patients and telling them [the doctors] what we see. It does help prevent patients from going elsewhere. Now the doctors will sometimes tell the pharmacist to cancel the prescription and send them back to the emergency room, whereas before they may not do that.*

Physicians' Opinions about Access and Navigation
- Allow for full integration of the PDMP into electronic health records and dispensing databases to simplify inquiry procedures and provide real-time data.
- Simplify name searching and allow for common name variations. Allow batch searches of patient names.
- Reduce the frequency of required password changes.
- Reduce the number of variables required to enter the PDMP.
- Reduce the number of clicks required to move through the system and improve the click flow to increase the speed of navigation.
- Allow users to maintain log-in for longer periods of time.

Physicians' Opinions about Content
- Correct the morphine equivalent data.
- Increase information collected to facilitate easier communication with other professionals, both physicians and pharmacists.

Physicians' Opinions about Regulations, Resources and Responsibilities
- Expand access to and use of the PDMP to include child protective services, VA hospitals, and ER facilities.
- Increase education and training about PDMP use to improve data accuracy and completeness.
- Maintain PDMP data primarily as a medical database for use in patient care.
- Allow physicians access to aggregate, de-identified PDMP data so they can do their own research, such as to better understand geographical and population patterns of use and misuse over time and help identify possible solutions.
- Ensure patient confidentiality and HIPAA compliance.
- Allocate resources to monitor access and use of PDMP to guard against misuse of information.
- Require physicians to make inquiry in PDMP only with all new non-surgical or acute injury patients and on a periodic basis for all patients, but not for all patients every time.
- Require dispensers to conduct real-time data entry of all dispensed medications into the PDMP.
- Expand delegates to include non-professional, well-trained clerical staff.

Nurse Practitioners and Physician Assistants' Opinions about Access and Navigation
- Integrate the PDMP with electronic health records to make inquiries much easier, eliminating the need to navigate back and forth between systems.

Nurse Practitioners and Physician Assistants' Opinions about Content
- Include data on controlled substances administered to patients while they are receiving care in the hospital.
- Create algorithms to flag potential abusers.

Nurse Practitioners and Physician Assistants' Opinions about Regulations, Resources and Responsibilities
- Increase PDMP marketing and education to increase awareness among potential users. Some prescribers are completely unaware and others do not know enough to utilize it proficiently. For example, providing informational webinars,

sending PDMP representatives to present at professional conferences, and releasing memos/briefs to state medical organizations. As one respondent said,

> *What could be helpful is educational webinars or tutorials on recognizing potential drug abuse and how to recognize signs of abuse within the PDMP data. An occasional webinar or presentation could be used by hospitals, conferences, or other groups to present current, useful examples of abuse that are specific to our state.*

- Expand access and use to emergency rooms, and jails and prisons.
- Ensure patient confidentiality and HIPAA compliance

Dentists and Veterinarians' Opinions about Access and Navigation
- Add a mobile application to provide fast and convenient access to the PDMP, because calls for controlled substances often come late at night and on weekends

Dentists and Veterinarians' Opinions about Regulations, Resources, and Responsibilities
- Increase education and marketing about the PDMP. For example, link it to professional organizations. As respondent one said,

> *It has to be brought to our attention in some way. Some sort of mandatory registration [through the licensing board] would be the best way to make sure that everyone with a DEA number knows about the system.*

INTRODUCTION

This assessment was commissioned by the Georgia Department of Behavioral Health and Developmental Disabilities (DBHDD), Office of Behavioral Health Prevention (OBHP) as part of the first phase of the "Georgia Strategic Prevention Framework Rx (SPF-Rx)" Project funded by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). (See https://www.samhsa.gov/capt/applying-strategic-prevention-framework.) Findings will be used to inform creation of the SPF-Rx strategic plan for the five-year project by October 31, 2017.

The assessment was designed primarily to explore two crucial aspects of Georgia's prescription drug abuse and misuse epidemic:

1. ***The prevalence of prescription opioid, sedative, and stimulant drug abuse and misuse across Georgia's 159 counties, with particular attention to "high need" geographic areas.*** Prescription drug abuse is intricately linked with the abuse of other substances, such as heroin and illegally manufactured drugs like fentanyl and methamphetamine (both of which can also be manufactured legally). Investigations of these non-prescription drugs are beyond the commissioned scope of this report. Planners will want to consider the bigger picture of drug abuse and misuse, including other illegal drugs, alcohol and tobacco, marijuana, economic and behavioral mechanisms of trafficking and consumption, and community readiness for action when thinking strategically to plan and implement interventions.

2. ***The perceptions of Georgia's Prescription Drug Monitoring Program (PDMP) by prescribers (e.g., physicians, dentists, nurse practitioners, midwives, physician assistants, veterinarians), dispensers (i.e., pharmacists), and prescriber/dispenser delegates (e.g., medical technicians, pharmacy technicians)***. PDMPs are statewide, electronic databases containing critical information about dispensed prescription drugs, the patients to whom they were dispensed, the prescribers by whom they were prescribed, and the dispensers from whom they were dispensed. It can be reviewed by prescribers, dispensers and authorized delegates to help determine past and prevent future misuse and abuse. It can also be used by authorized researchers (using de-identified data) to quantify and publicize patterns of abuse and misuse by patients, prescribers, and dispensers. Georgia's PDMP is described in detail beginning on page 31 of this report.

Some of the same databases used to explore prescription drug abuse and misuse, and one other database, were also examined to assess ***underage drinking in Georgia***, another critical behavioral health issue being addressed by OBHP.

After an introductory section summarizing recent national and statewide findings about prescription drug abuse and PDMPs, the bulk of the report is divided into three sections: Prescription Drug Abuse and Misuse Prevalence and Trends in Georgia (including the identification of high-need geographic areas); Underage Drinking in Georgia; and Prescriber, Dispenser, and Delegate Perceptions of Georgia's PDMP. Recommendations are embedded in each report section.

OVERVIEW OF PRESCRIPTION DRUG ABUSE AND PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs)

Following is a brief synopsis of national and state trends in (a) opioid, sedative, and stimulant prescription drug abuse and (b) prescription drug monitoring programs (PDMPs.) A comprehensive overview specific to Georgia's opioid/opiate epidemic is available in the 2017 Substance Abuse Research Alliance report, "Prescription Opioids and Heroin Epidemic in Georgia - A White Paper (Alliance, 2017)."

A detailed account of how the opioid/heroin epidemic (with a focus on heroin) is playing out in one Georgia locality (north Fulton County) is available in the 2016 Applied Research Services and Office of the Fulton County District Attorney report, "A Brief Window of Opportunity: Heroin in North Fulton County (Kevin Baldwin, 2016)."

OPIOID, SEDATIVE, AND STIMULANT DRUG ABUSE IN THE U.S.

More individuals are killed by drug overdoses than motor vehicle accidents (Rudd, Aleshire, Zibbell, & Gladden, 2016). In 2015, 52,404 individuals died in the U.S. from drug overdoses. U.S. drug overdose deaths are steadily increasing, with 12.3 deaths per 100,000 individuals in 2010 to 16.3 in 2015 (Rudd, Seth, David, & Scholl, 2016). Georgia also had significant increases in drug overdose deaths during this time with 11.1 deaths per 100,000 individuals in 2010 to 12.8 in 2015 (Georgia Department of Public Health, 2017).

Which drugs are most frequently involved in overdose deaths?
From 2010 to 2014, data from the National Vital Statistics System reveal that the drugs most frequently involved in drug overdose deaths included the following:

- Opioids: heroin, oxycodone, methadone, morphine, hydrocodone, and fentanyl;
- Benzodiazepines: alprazolam and diazepam; and
- Stimulants: cocaine and methamphetamine (Warner, Trinidad, Bastian, Minino, & Hedegaard, 2016).

Who misused prescription psychotherapeutic drugs?
Using results from the 2015 National Survey on Drug Use and Health (NSDUH), an estimated 44.5% of Americans, 12 years or older, used and 7.1% misused one or more type of prescription psychotherapeutic drugs (prescription pain relievers, sedatives, stimulants, or tranquilizers) (Hughes et al., 2016). Among those who had used prescription psychotherapeutic drugs, 15.9% were misusers. Other findings are summarized in Table 1.

Table 1. Prescription Drug Use Nationwide (2015)

	Used in Past Year	Misused in Past Year Among Total Population	Misused in Past Year Among Those With Any Use
Prescription Pain Relievers	36.4%	4.7%	12.8%
Prescription Tranquilizers	14.7%	2.3%	15.4%
Prescription Stimulants	6.4%	2.0%	30.5%
Prescription Sedatives	6.9%	0.6%	8.1%

Which prescription pain relievers are misused the most?

In 2015, an estimated 2.7% of the U.S. population misused prescription hydrocodone products (Hughes et al., 2016). These findings are detailed in Table 2.

Table 2. Prescription Pain Reliever Use Nationwide (2016)

Prescription Pain Relievers	Misused in Past Year Among Total Population
Hydrocodone products (an opioid)	2.7%
Oxycodone products (an opioid)	1.6%
Tramadol products (an opioid)	0.7%
Morphine products (an opioid)	0.3%
Buprenorphine products (an opioid)	0.3%
Methadone (an opioid)	0.2%
Fentanyl products (an opioid)	0.1%
Oxymorphone products (an opioid)	0.1%
Hydromorphone products (an opioid)	0.1%
Any other prescription pain reliever	0.3%

People most commonly reported getting misused pain relievers from a friend or relative (53.7%) or just one doctor (34.0%). Only 4.9% of individuals bought it from a drug dealer or some other stranger. Of drug overdose deaths, 63.1% involved an opioid (Rudd, Seth, et al., 2016). Death rates due to opioid overdoses in Georgia have steadily increased overtime, with 6.2 deaths per 100,000 individuals in 2010 to 8.8 in 2015 (Georgia Department of Public Health, 2017). To learn more about the epidemic of opioid overprescribing and overdose deaths, read Shatterproof's article on prescription drug monitoring programs (Shatterproof, 2016).

Which prescription stimulants are misused the most?

In 2015, an estimated 1.8% of the U.S. population misused prescription amphetamine products (Hughes et al., 2016). These findings are detailed in Table 3.

Table 3. Amphetamine Use Nationwide (2016)

Prescription Stimulants	Misused in Past Year Among Total Population
Amphetamine products	1.8%
Methylphenidate products	0.4%

Which prescription sedatives are misused the most?

In 2015, an estimated 0.4% of the U.S. population misused prescription Zolpidem products (Hughes et al., 2016). These findings are detailed in Table 4.

Table 4. Sedative Use Nationwide (2016)

Prescription Sedatives	Misused in Past Year Among Total Population
Zolpidem products	0.4%
Benzodiazepine sedatives	0.1%
Any other prescription sedative	0.1%

Who is at the most risk for prescription drug misuse?

According to a recent meta-analysis by SAMHSA (Substance Abuse and Mental Health Services Administration, 2016), those at most risk for prescription drug misuse include those with the following:

- A history of mental illness,
- Acute and chronic pain,
- Physical health problems,
- Heightened physiological reaction to certain types of drugs, and/or
- A history of other substance use or misuse.

What can be done to prevent prescription drug misuse?

SAMHSA's literature review identified 17 strategies targeted at preventing prescription drug misuse (Substance Abuse and Mental Health Services Administration, 2016). These strategies are organized into the following categories:

- *Education:* for example, media messages and curriculum providing education to the general public of the dangers of medication misuse; education targeted at prescribers regarding best practices for prescribing controlled substances;
- *Proper medication disposal:* for example, drug take-back days to allow for proper disposal of medication;

- *Harm reduction:* for example, changing a drug's chemical makeup to lessen its abusive properties); and
- *Tracking and monitoring:* for example, monitoring PDMPs for suspicious behavior.
- *Multi-component:* combining multiple strategies (e.g. education and harm reduction) to address prescription drug misuse and overdose.

COMPARISON OF GEORGIA AND THE U.S.

Information from the National Survey on Drug Use and Health (Substance Abuse and Mental Health Services Administration, 2015b) indicates that Georgia's percentages of cocaine and heroin use and alcohol dependence were consistent with national percentages among ages 12-17 and 18 and older. See Figures 1 and 2.

Illicit Drugs
In 2013-2014, of youth ages 12-17, 8.4% in Georgia and 9.1% in the United States reported using illicit drugs in the month prior to being surveyed (Substance Abuse and Mental Health Services Administration, 2015a).

In 2013-2014, of those 12 years or older, 2.9% in Georgia and 2.6% in the United States reported illicit drug dependence or abuse in the past year. Among those in Georgia from 2007 to 2014, only 13.3% received treatment for their illicit drug use (Substance Abuse and Mental Health Services Administration, 2015a).

Pain Relievers
In 2013-2014, of youth ages 12-17, 5.2% in Georgia and 4.7% in the United States reported nonmedical use of pain relievers in the past year (Substance Abuse and Mental Health Services Administration, 2015a).

Alcohol
In 2013-2014, of youth ages 12-20, 12.1% in Georgia and 14.0% in the United States reported binge alcohol use in the month prior to being surveyed (Substance Abuse and Mental Health Services Administration, 2015a).

In 2013-2014, of youth ages 12-27, 55.8% in Georgia and 60.9% in the United States perceived no great risk from having five or more drinks once or twice a week (Substance Abuse and Mental Health Services Administration, 2015a).

In 2013-2014, of those 12 or older, 6.2% in Georgia and 6.5% in the United States reported alcohol dependence or alcohol abuse in the past year. Among those in

Georgia from 2010 to 2014, only 7.8% received treatment for their alcohol use (Substance Abuse and Mental Health Services Administration, 2015a).

In 2013-2014, of adults 21 or older, 6.0% in Georgia and 6.7% in the United States reported heavy alcohol use in the past month (Substance Abuse and Mental Health Services Administration, 2015a).

Figure 1. Cocaine Use, Heroin Use and Alcohol Dependence in the Past Year Among Adults 18 Years and Older in 2014-2015
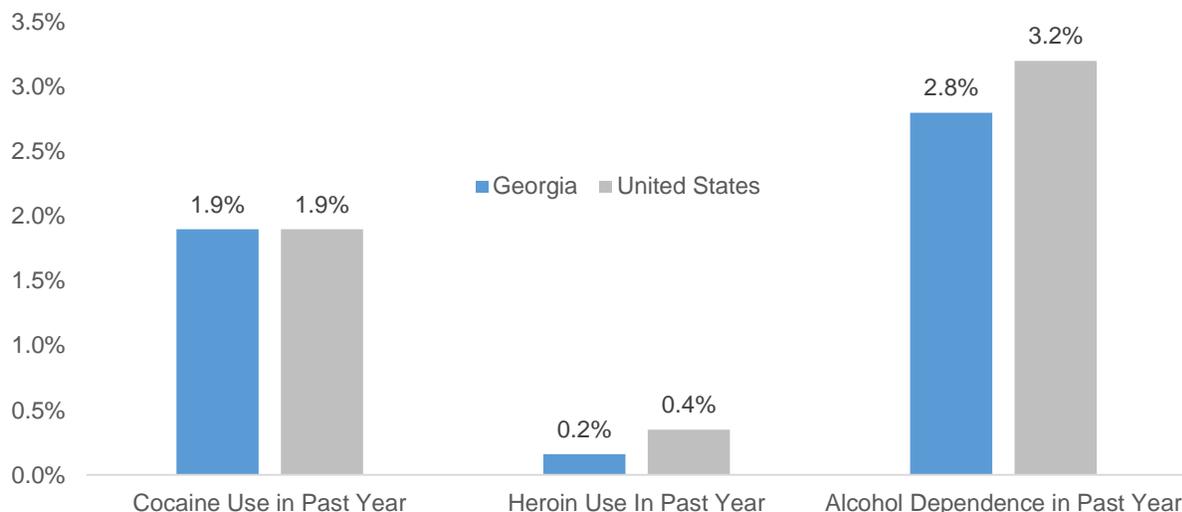
Figure 2. Cocaine Use, Heroin Use and Alcohol Dependence in the Past Year Among Youth Ages 12-17 in 2014-2015
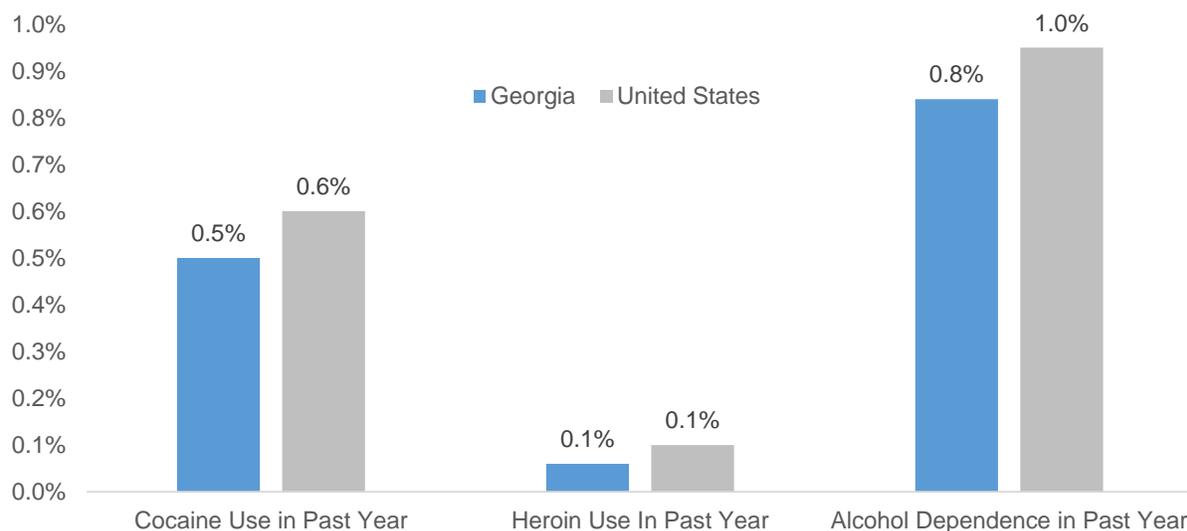
BEST PDMP PRACTICES IN THE U.S.

The Centers for Disease Control and Prevention argues for the importance of using Prescription Drug Monitoring Programs (PDMPs) to reduce illegal access to controlled substances – such as opioids, stimulants, and depressants – and to ensure appropriate levels and combinations of prescriptions (Centers for Disease Control and Prevention, 2016b). PDMPs can help identify "prescription fraud, forgeries, doctor shopping, and improper prescribing and dispensing" (Prescription Drug Monitoring Program Center of Excellence at Brandeis, 2014). PDMPs can help identify medication errors from valid prescriptions prescribed by multiple prescribers. In deaths involving multiple drugs, co-prescribing opioids and benzodiazepines is the most common cause of overdose deaths (Shatterproof, 2016). PDMPs can be used as tools to monitor the effectiveness of interventions and legislation aimed at preventing drug overdoses (Gugelmann, Perrone, & Nelson, 2012). PDMPs can facilitate criminal investigations, decreasing the effort required by law enforcement to inspect drug diversion cases (United States General Accounting Office, 2002). PDMPs may also serve as a deterrent to potential doctor shopping if individuals suspect their doctors will check the PDMP. PDMPs have been shown to decrease the supply of prescription pain relievers and stimulants, thereby decreasing the potential for abuse (Simeone & Holland, 2006). In sum, PDMPs can be life-saving resources, ensuring that potentially deadly combinations and/or levels of substances not be prescribed and limiting illegal access to substances.

As of March 2017, Missouri is the only state without a PDMP. However, not all research demonstrates positive results for PDMP use. For example, a study comparing states with and without PDMPs from 1999 to 2008 found that access to a PDMP did not decrease drug overdose mortality in most states (Li et al., 2014). However, the features of each PDMP – such as the number of schedules monitored, the frequency of data collection, who are authorized requestors of information, data sharing across states, and laws regulating use of the PDMP – vary greatly from state to state. The PEW Charitable Trusts and the PDMP Training and Technical Assistance Center provide an excellent summary of evidence-based practices to optimize PDMP use and usefulness (Prescription Drug Monitoring Program Training and Technical Assistance Center, 2016a; The PEW Charitable Trusts, 2016). Some factors that may increase the use and usefulness of PDMPs include:
- Shortening the amount of time between when a medication is distributed and when that information is recorded in a PDMP;
- Streamlining prescriber enrollment into the PDMP;
- Educating providers about how to enroll in their PDMP, how to use their PDMP, and how to detect potential drug misuse;
- Integrating PDMP data into providers' already existing electronic health records;

- Simplifying interpretation of PDMP interfaces, including dashboards and summarized data displays;
- Auditing use of the PDMP to ensure prescriber use;
- Requiring that identification of the person picking up prescriptions be checked against patient profile information in the PDMP;
- Collecting information about method of payment in the PDMP;
- Data sharing across states (often referenced as "interoperability"); and
- Obtaining secure grant funding to operate the PDMP.

Allowing prescribers to assign delegates (another member of their healthcare team) to use PDMPs on their behalf may also increase usage of PDMPs (The PEW Charitable Trusts, 2016). Assigning delegates can help with time constraint barriers that many providers face. Oregon began allowing delegates to use their PDMP in 2014 and overall use of their PDMP increased by 30% in the year after delegation was allowed.

Many PDMPs automatically alert users to potential risk factors for overdose for their clients (for example, multiple prescribers). Maine's PDMP contains such alerts and they found that multiple provider episodes decreased from five per 100,000 residents in 2010 to 3.2 per 100,000 residents in 2014 (The PEW Charitable Trusts, 2016).

Another strategy for increasing the usefulness of PDMPs is to establish an advisory committee of stakeholders – including legislators, public health officials, researchers, clinicians, public safety groups, patients, family advocates, etc. – who meet regularly to review and evaluate PDMP data, assess PDMP effectiveness, document successes, and make improvements as needed (Lee, 2015). This strategy not only increases communication about the PDMP with key stakeholders but also imposes greater levels accountability. Similarly, sharing PDMP data with external researchers can also help to evaluate the effectiveness of the PDMP, describe PDMP use, illustrate prescribing patterns and explore signs of high risk prescription practices, identify patient-doctor shopping behavior, monitor changes over time relative to legislative changes, and generate solutions for decreasing drug abuse and misuse (Shatterproof, 2016).

Prescriber and dispenser mandated use of PDMPs is arguably the most effective method of increasing prescriber utilization as a number of states have demonstrated positive results after regulations were implemented to require the use of PDMPs. Following is a summary of some of these results (Centers for Disease Control and Prevention, 2014, 2016a; Freeman, Goodin, Troske, & Talbert, 2015; PDMP Center of Excellence at Brandeis University, 2016):

New York:
- 2012 Action: Required prescribers to enroll and use PDMP before prescribing opioids.
- 2013 Result: A decline of 9.5% in the number of opioid prescriptions.

Tennessee:
- 2012 Action: Required prescribers to enroll and use PDMP.
- 2015 Result: A decline of 7.9% in the number of opioid prescriptions.

Kentucky:
- 2012 Action: Required prescribers to enroll and use PDMP.
- 2013 Result: A decline of 8.5% in dispensing of controlled substances. A decline of 11.8% in the number of oxycodone prescriptions and a 13.0% decline in hydrocodone prescriptions.

Ohio:
- 2011 Action: Required prescribers to use PDMP before prescribing controlled substances if they expected treatment to last more than twelve weeks.
- 2013 Action: A decline of 8.7% in the number of oxycodone prescriptions and an 11.1% decline in hydrocodone prescriptions.

Florida:
- 2011 Action: Mandated dispenser reporting in the PDMP, pain clinic regulations, and prohibited distribution of schedule II and III drugs from physicians' offices.
- 2012 Result: A decrease of 17.7% in overall drug overdose deaths and a 52.1% decrease in oxycodone overdose deaths.

GEORGIA'S PDMP

Georgia's PDMP became operational in July of 2013. According to the Georgia Drugs and Narcotics Agency,

The purpose of the PDMP is to assist in the reduction of the abuse of controlled substances; to improve, enhance, and encourage a better quality of healthcare by promoting the proper use of medications to treat pain and terminal illness; and to reduce duplicative prescribing and overprescribing of controlled substances practices. The data collected will be used to enhance patient care by providing prescription drug monitoring information that will ensure legitimate use of controlled substances in healthcare, including palliative care, research, and other medical pharmacological uses. (Georgia Drugs and Narcotics Agency, 2017)

The Georgia PDMP is a stand-alone system accessed online. It is not currently integrated into other electronic health record systems. To assist with registration and use of Georgia's PDMP, the Georgia Drugs and Narcotics Agency provides on its website (https://gdna.georgia.gov/georgia-prescription-drug-monitoring-program) three user-friendly manuals detailing (1) the PDMP registration process, (2) how to submit data to the PDMP as a dispenser, and (3) a comprehensive PDMP user support manual. Each of these manuals provides screen-shots of the PDMP to allow readers to follow the instructions provided with ease.

The streamlined registration process is completed online. The following individuals may register and request data from Georgia's PDMP (Prescription Drug Monitoring Program Training and Technical Assistance Center, 2016b):

- Health Care Professional Prescribers (including physicians, physicians' assistants, nurse practitioners/clinical nurse specialists, dentists, optometrists, podiatrists, qualified medical residents and midwifes) and prescriber delegates;
- Dispensers (pharmacists) and dispenser delegates;
- Law enforcement (federal, state, and local) and prosecutors with proper authorization;
- Licensing boards;
- Medicaid Fraud and Abuse staff; and
- Medicaid Drug Utilization and Review staff.

Beginning July 1, 2016, prescriber delegates (licensed staff) and pharmacist delegates (licensed pharmacist technicians) were allowed access to the PDMP. Also, beginning July 1, 2016, PDMP data is kept and monitored over the course of two years (previously only one year.) Georgia's PDMP offers several attractive features, including allowing users to do the following:

- Search for information from a select number of other states;
- Simultaneously search for multiple patients in "bulk" (useful, for example, when looking up all of one's patients for the next day);
- Search for all prescriptions made under a prescriber's name to ensure no fraudulent prescriptions have been written; and
- A data dashboard displaying recent patient searches, patient alerts, and information about delegates. A screen shot of this data dashboard from the PDMP user manual is available on the GDNA website (Georgia Drugs and Narcotics Agency, 2016) and depicted in Figure 3.

Figure 3. Sample PDMP Screen Shot

In Georgia, all dispensers (pharmacies and dispensing prescribers) are mandated to submit information within 24 hours (previously 10 days) after the substance is dispensed into Georgia's PDMP for dispensed Schedule II, III, IV, and V controlled substance prescriptions. This mandate became law in April 2017 and is now in line with expert recommendations that this information be recorded in the PDMP in "real-time" to optimize the usefulness of the PDMP information in preventing substance abuse (Centers for Disease Control and Prevention, 2016c; Shatterproof, 2016).

Another change legislated in April 2017 was to mandate, under certain conditions, that all prescribers check the PDMP prior to prescribing controlled substances (Schedule II,

III, IV, or V). Previously, only physicians in pain management clinics were required to register in and regularly check the PDMP (Prescription Drug Monitoring Program Training and Technical Assistance Center, 2016b). In June of 2016, about 5,000 Georgia doctors had an account in the PDMP (Eloy, 2016). In contrast, according to the Georgia Board for Physician Workforce, in 2012 and 2013, there were 20,492 licensed physicians actively practicing in Georgia (Georgia Board for Physician Workforce, 2017). Moreover, in 2015 in Georgia, there were 31,057 prescribers registered with the Drug Enforcement Agency (DEA) (Prescription Drug Monitoring Program Training and Technical Assistance Center, 2016b).

A third 2017 change, among others, is that Georgia's PDMP will now be housed with Georgia's Department of Public Health (DPH) rather than the Georgia Drugs and Narcotics Agency. Moreover, the DPH is mandated to test the PDMP randomly "to determine if it is accessible and operational 99.5 percent of the time."

PRECRIPTION DRUG ABUSE AND MISUSE, PREVALENCE AND TRENDS IN GEORGIA

INTRODUCTION

Assessment team members attended meetings of the U.S. Attorney's Office, Northern District of Georgia "Heroin Working Group," the Substance Abuse Research Alliance, the Georgia Prescription Drug Abuse Prevention Initiative Collaborative, and the State Epidemiological Outcomes Workgroup to identify databases containing recent, Georgia county information on prescription drug abuse and misuse. Ten recognized experts in Georgia, as well as nationally recognized expert John Eadie from Brandeis University, were also interviewed to this end. Nine databases were eventually identified, five of which were obtained and analyzed with findings included in this report:

- *Georgia Student Health Survey*, including self-report information about recent use of prescription drugs and alcohol;
- *National Poisoning Data System*, including information about poisoning from prescription drugs and alcohol;
- *Medical Examiners Drug Overdose data*, including alcohol and drug-related information about cause of death;
- *National Seizure System*, including information about drugs seized by law enforcement; and
- *Computerized Criminal History*, including information about illegal possession of alcohol by minors. Findings from this database are reported only in the underage drinking section of this report.

One database yielded limited findings that are included briefly in this report:

- *The Prescription Drug Monitoring Program* (described earlier)

Findings are presented below for each of these data sets. Strengths and weaknesses of the data are described first. Then the findings are presented, with variations for some data sets, regarding (a) data from the most recent available year and (b) changes from the first year to the most recent year for which data are available. (**NOTE:** Tables and figures in this section are not numbered in order to maximize visual space.)

Three other relevant data sets were unavailable in time for inclusion in this analysis:

- *Hospital discharge data*, including drug-related diagnosis codes;
- *Emergency room visit discharge data*, including drug-related diagnosis codes; and
- *Treatment episode data*, including information about alcohol and drug treatment services delivered by DBHDD facilities.

It is strongly recommended that these data be included in future analyses.

GEORGIA STUDENT HEALTH SURVEY

The Georgia Student Health Survey (GSHS) is administered statewide by the Georgia Department of Education to students in grades 3 through 12. This survey is available to public and private schools. Each student in the dataset is identified with a specific school, and each school is linked with a specific county. For middle and high-schoolers, GSHS questions include measures of past 30-day alcohol and drug use, along with other measures such as school climate, bullying, harassment, etc.

Data Strengths
- Students were not allowed to skip questions; so, there are no missing data.
- In 2015 and 2016, data are reported separately for opiates and other prescription drugs; these data are now available.
- This is a very large and presumably representative sample: almost all schools reached the required 75% response rate after 2014. This renders the GSHS sample more representative of Georgia's entire student population than the Youth Risk Behavior Survey administered previously to a much smaller and random sample of Georgia's students.

Data Limitations
- Some drugs were reported in earlier years but dropped for later years and vice-versa, making the identification of longitudinal trends difficult. For example, opioid-specific questions are available only for 2015 and 2016.
- There are few demographic variables. Gender is only available in the 2012 data. Age is missing for all years; so, only data on students from 8th to 11th grades were used in this analysis as a proxy for the 14- to 17-year-old age group of interest. There were 360,985 student surveys in 2015 and 384,409 in 2016 from these grades.
- The response rate before 2014 is unknown.
- These student self-report data are prone to response biases that compromise validity as indicators of actual use.

The statewide percentages of reported prescription drug use by students are depicted in the table below. Percentages were calculated using the raw number of students reporting drug use as the numerator and the total number of 8th – 11th grade students that responded to the survey (either state or county) as the denominator. For example, in the table below, to calculate the percent of students in Georgia reporting prescription painkiller use without a prescription, the numerator is the total number of students reporting using prescription painkillers without a prescription and the denominator is the number of 8th – 11th grade respondents (for the appropriate year). The percentages dropped for all three drugs examined, though negligibly for tranquilizers/sedatives and slightly for painkillers and stimulants. Ranks of all 159 Georgia counties for all variables are presented in Appendix A.

	2015 (N=360,985)	2016 (N=384,409)	Change From 2015 to 2016 (N=23,424 fewer)
Prescription painkillers	2.50%	2.06%	-0.44%
Prescription stimulants	1.48%	1.21%	-0.27%
Prescription tranquilizers/sedatives	1.52%	1.49%	-0.03%

Most recent data

Statewide in 2016, 2.1% of students reported prescription drug painkiller use without a doctor's prescription during the past 30 days. The percentage in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Prescription Painkiller County		Prescription Painkiller County	
Long	4.8%	Burke	3.8%
Berrien	4.8%	Colquitt	3.8%
Sumter	4.1%	Irwin	3.6%
Lincoln	3.9%	Putnam	3.5%
Miller	3.9%	Effingham	3.5%

During the Past 30 Days, Did You Use a Prescription Drug Painkiller (such as Oxycontin or Vicodin) Without a Doctor's Prescription at Least Once? (2016)

% painkiller users (2016)

- 0 - 2
- 2 - 3
- 3 - 3.5
- 3.5 - 4
- 4 - 4.5
- 4.5 - 5
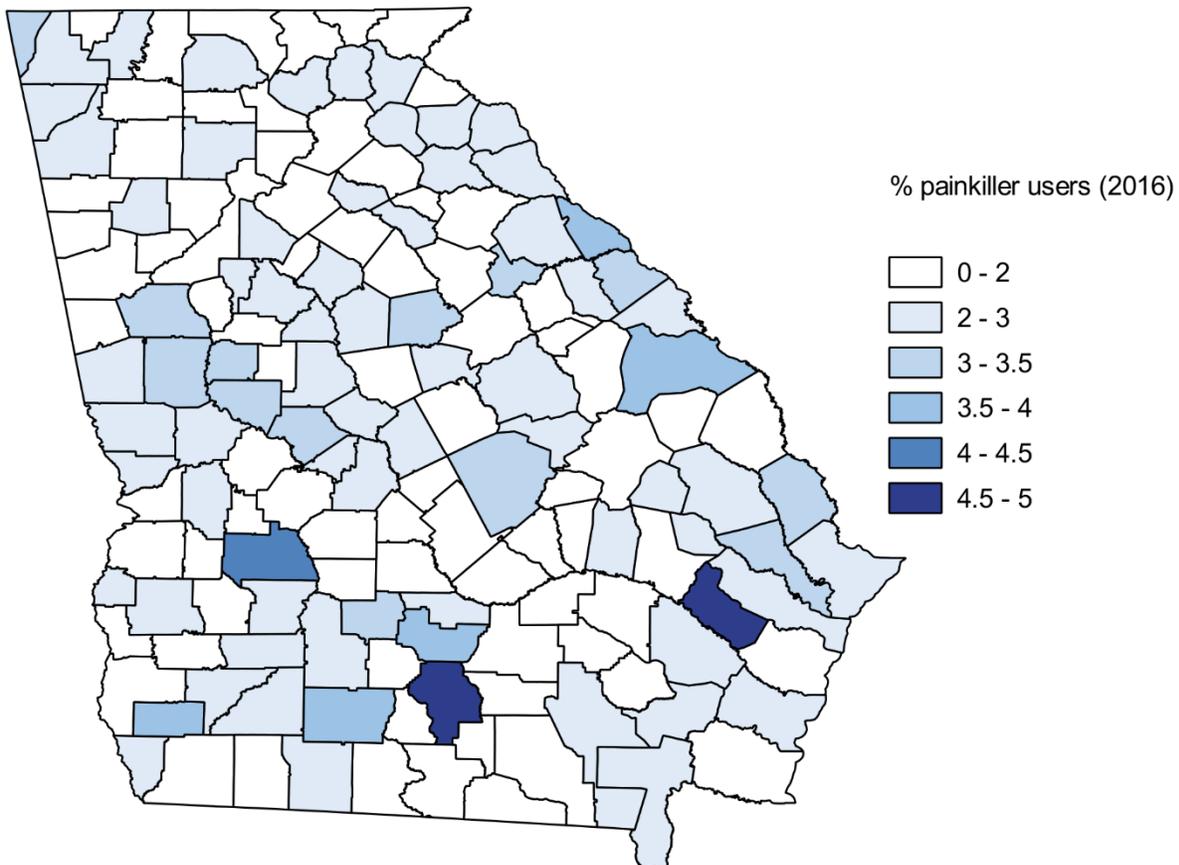
Change data

The change from 2015 to 2016 in the percentage of students who reported use in the past 30-days in each Georgia county is illustrated in the map below. The counties with the highest undesirable change were:

Prescription Painkiller County		Prescription Painkiller County	
Long	+2.1%	Johnson	+1.3%
Sumter	+2%	Wiles	+1.1%
Berrien	+2%	Lumpkin	+1.1%
Twiggs	+1.7%	Lincoln	+1.1%
Ben Hill	+1.6%	Hart	+1%

Change in Reported Use of a Prescription Drug Painkiller (such as Oxycontin or Vicodin) Without a Doctor's Prescription at Least Once During the Past 30 Days (2015-2016)
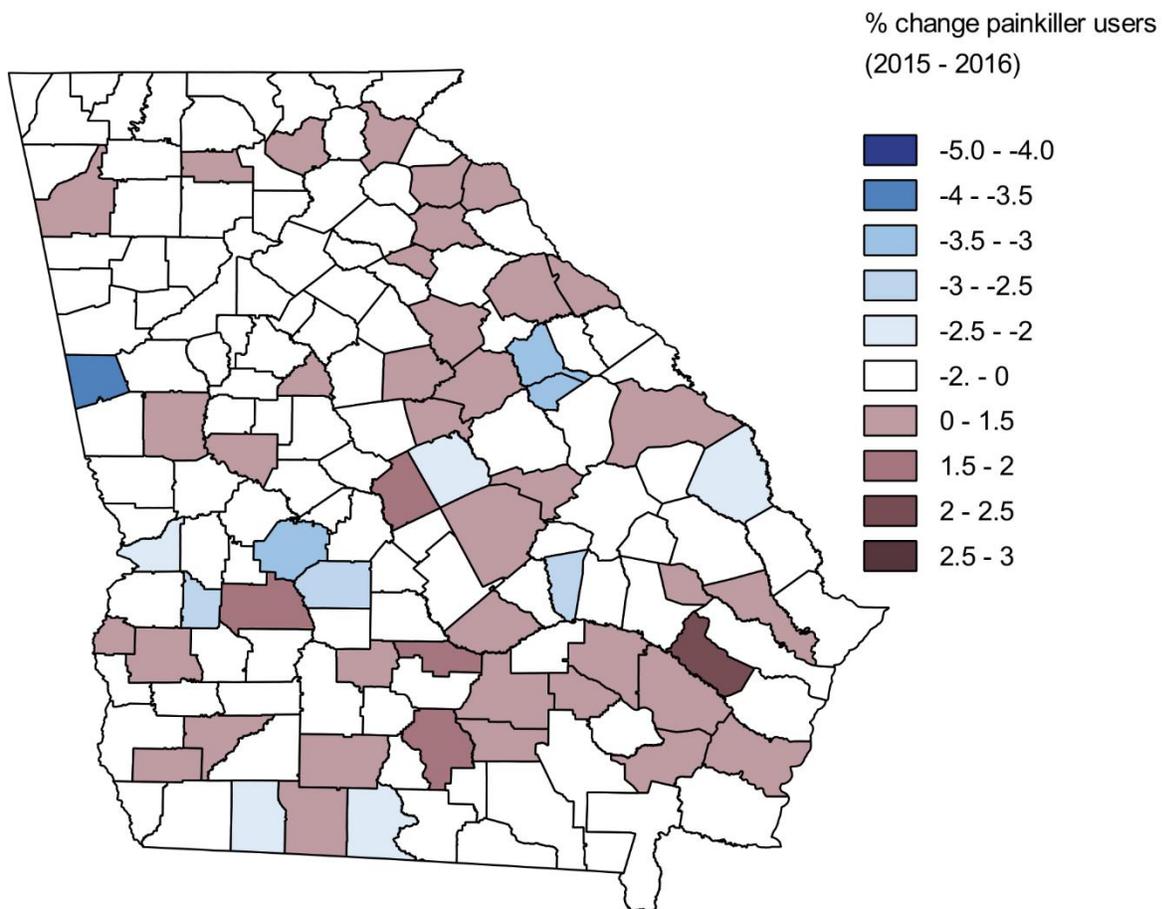
An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

Most recent data

Statewide in 2016, 1.5% of students reported prescription drug tranquilizer or sedative use without a doctor's prescription during the past 30 days. The percentage in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Prescription Tranquilizer/Sedative County		Prescription Tranquilizer/Sedative County	
Clay	3.8%	Irwin	3.1%
Marion	3.4%	Long	3.0%
Colquitt	3.2%	Dade	2.9%
Talbot	3.2%	Troup	2.8%
Putnam	3.1%	Burke	2.7%

During the Past 30 Days, Did You Use a Prescription Drug Tranquilizer or Sedative (such as Xanax or Ativan) Without a Doctor's Prescription at Least Once? (2016)

% tranquilizer/sedative users (2016)

- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 3.25
- 3.25 - 3.5
- 3.5 - 4

Change data

The change from 2015 to 2016 in the percentage of students who reported use in the past 30 days in each Georgia county is illustrated in the map below. The counties with the highest undesirable change were:

Prescription Tranquilizer/Sedative County	
Long	+2.3%
Peach	+1.8%
Marion	+1.7%
Burke	+1.5%
Evans	+1.3%

Prescription Tranquilizer/Sedative County	
Putnam	+1.3%
Greene	+1.2%
Stephens	+1.2%
Irwin	+1.2%
Meriwether	+1.1%

Change in Reported Use of Tranquilizers/Sedatives Without a Doctor's Prescription (2015-2016)

% change tranquilizer/sedative users (2015 - 2016)

- -1.5 - -1.25
- -1.25 - -1
- -1 - -.75
- -.75 - -.5
- -.5 - -.25
- -.25 - 0
- 0 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 2.5
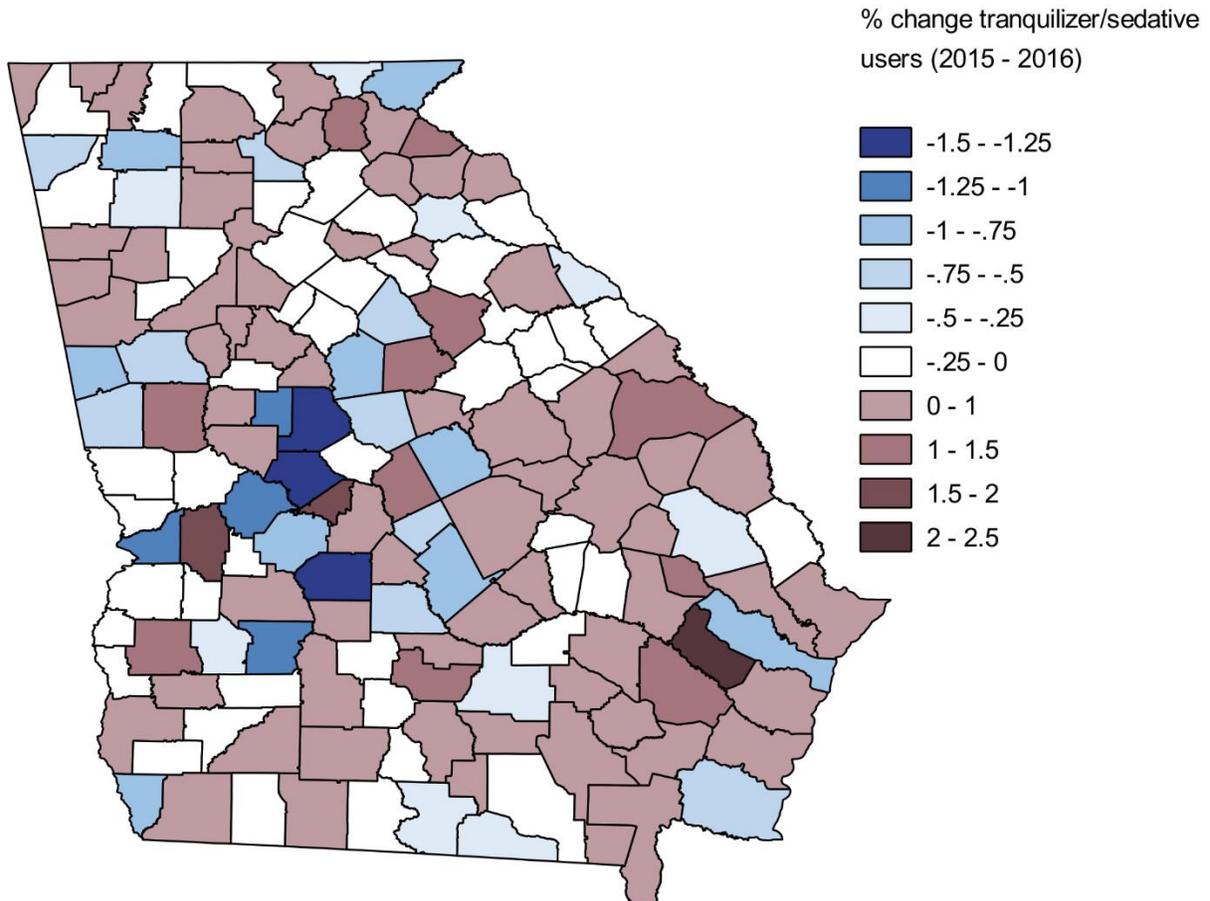
Most recent data

Statewide in 2016, 1.2% of students reported prescription drug stimulant use without a doctor's prescription during the past 30 days. The percentage in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Prescription Stimulant County		Prescription Stimulant County	
Long	3.5%	Bryan	2.5%
Pike	3.0%	Troup	2.5%
Colquitt	3.0%	Schley	2.5%
Marion	2.5%	Effingham	2.4%
Dade	2.5%	Evans	2.4%

During the Past 30 Days, Did You Use a Prescription Drug Stimulant (such as Ritalin or Adderall) Without a Doctor's Prescription at Least Once? (2016)
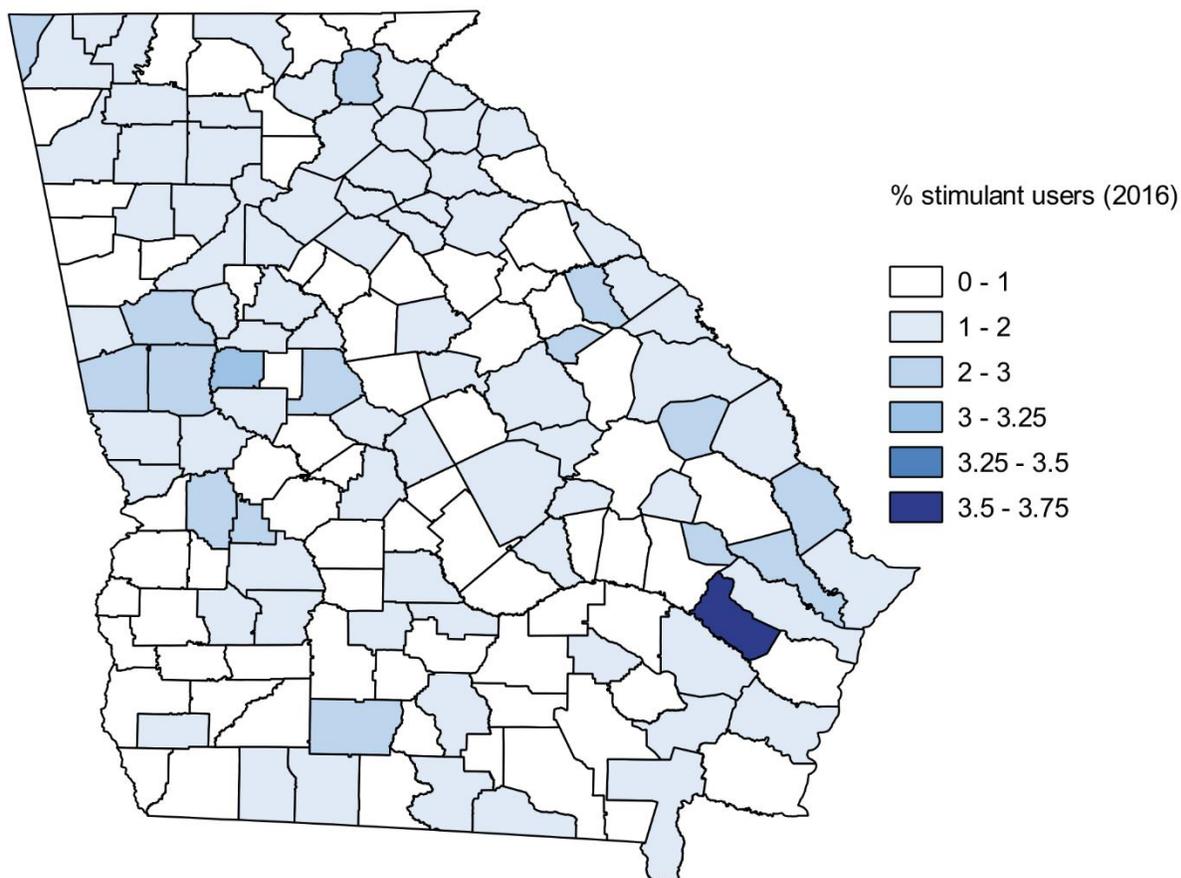
% stimulant users (2016)

- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 3.25
- 3.25 - 3.5
- 3.5 - 3.75

Change data

The change from 2015 to 2016 in the percentage of students who reported use in the past 30 days in each Georgia county is illustrated in the map below. The counties with the highest undesirable change were:

Prescription Stimulant County	
Long	+1.7%
Charlton	+1.4%
Schley	+1.3%
Sumter	+1.2%
Marion	+1.1%

Prescription Stimulant County	
Wheeler	+0.8%
Echols	+0.8%
Laurens	+0.7%
Evans	+0.7%
Fannin	+0.6%

Change in Reported Use of a Stimulant Without a Doctor's Permission in the Past 30 Days (2015-2016)
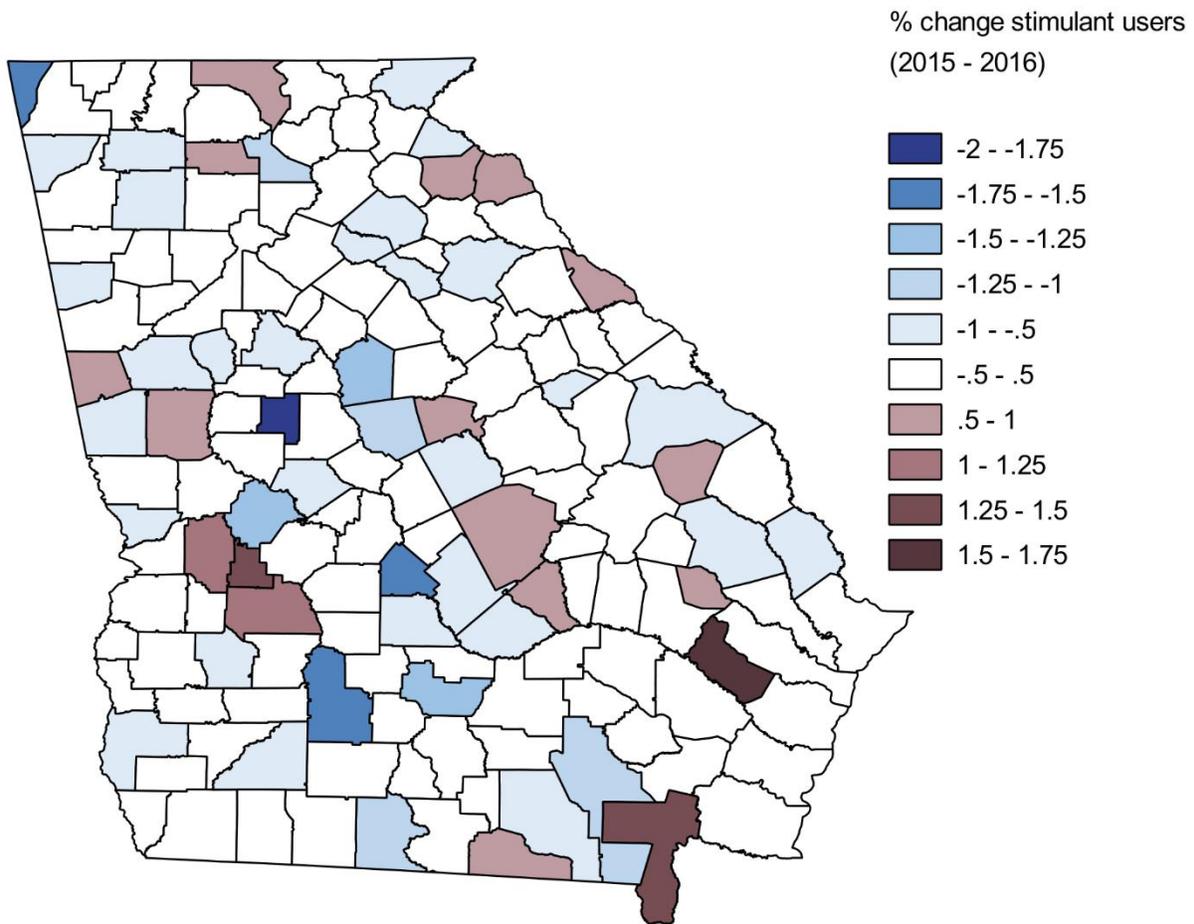
% change stimulant users (2015 - 2016)

- -2 - -1.75
- -1.75 - -1.5
- -1.5 - -1.25
- -1.25 - -1
- -1 - -.5
- -.5 - .5
- .5 - 1
- 1 - 1.25
- 1.25 - 1.5
- 1.5 - 1.75

Findings by Race

As mentioned above, few demographic data were available in any of the data sets examined for this study. GSHS data, however, were available to sort by race. Aggregate statewide findings are presented below. Ranks for all 159 counties by race and type of substance are voluminous and, consequently, not appended, but breakouts are available on request.

Most recent data

In 2016 statewide, for all drug types examined, the highest percentages of reported users were 'other," followed in descending order by White, Hispanic/Latino, Black and Asian/Pacific Islander (with one slight deviation for stimulants.)

	Black	Hispanic/Latino	White	Asian/Pacific Islander	Other
Rx Painkiller %	1.78	1.98	2.31	1.28	2.88
Rx Tranquilizer/sedative %	1.25	1.53	1.67	0.74	2.22
Rx Stimulant %	0.74	1.12	1.60	0.84	1.74

Change data

From 2015 to 2016, reported use showed small declines among all races for all three substances, except for a slight increase in tranquilizer/sedative use among Blacks. Painkiller use showed decline across all races.

	Black	Hispanic/Latino	White	Asian/Pacific Islander	Other
Rx Painkiller %	-0.32	-0.34	-0.48	-0.59	-0.89
Rx Tranquilizer/sedative %	0.14	-0.03	-0.12	-0.44	-0.08
Rx Stimulant %	-0.10	-0.22	-0.38	-0.42	-0.29

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NATIONAL POISONING DATA SYSTEM

This section summarizes rates of poisonings in Georgia in 2016 and changes from 2012 to 2016. These data are from the National Poisoning Data System (NPDS), which compiles data from American Association of Poison Control Centers (AAPCC).

Data Strengths

The National Poisoning Data System was established in 1983. Its data collection and reporting techniques have been refined and standardized over time and are known as relatively reliable.

Data Limitations

- To calculate rates of poisoning, population counts among those aged 12-24 per county from the American Community Survey (ACS) were used. However, the age range of the raw poisoning counts, 12-25 (numerator), differs from the age range of the population counts, 12-24 (denominator).
- Rates for Early County are not available. All other Georgia counties are included.
- Due to low numbers of these events, changes among years among counties should be interpreted with caution.
- There were no available demographic data.

Overall, in Georgia the rates of poisoning cases from 2012 to 2016 per 10,000 persons ages 12-25 are depicted in the table below. These rates varied slightly from year to year but remained relatively flat overall until 2016, when the overall "any poisoning" rate increased. Ranks of all 159 Georgia counties for all variables are presented in Appendix B.

	2012	2013	2014	2015	2016	Change From 2012 to 2016
Any Poisonings	8.4	8.6	8.7	8.6	9.4	1.0
Opiate Poisonings	1.0	1.3	1.0	0.9	1.2	0.2
Tranquilizer/Sedative Poisonings	3.7	3.5	3.9	3.9	4.0	0.3
Stimulant Poisonings	1.0	1.3	1.3	1.0	1.0	< 0.1

Most recent data

The statewide rate of all reported poisoning cases in 2016 (per 10,000 persons ages 12-25) was 9.5. The rate in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Any Poisoning County		Any Poisoning County	
Pickens	20.38	Baker	15.77
Gwinnett	18.98	Ben Hill	15.74
Brooks	16.50	Glascock	12.79
Screven	16.22	Jackson	11.18
Coweta	15.86	Appling	11.12

Rates of any Reported Poisoning Cases in 2016 for Those Ages 12 to 25 (per 10,000 Persons Ages 12-24)

Poisonings per 10k pop. (2016)

- 0 - 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25
- 25 - 35

Change data

The rate change from 2012 to 2016 in each Georgia county is illustrated in the map below. The counties with the largest increase in poisoning rate were:

Any Poisoning County	
Seminole	+27.0
Greene	+19.2
Ware	+15.1
Bacon	+14.9
Jasper	+14.3

Any Poisoning County	
Glascock	+12.8
Charlton	+12.6
Pickens	+12.2
Wilcox	+11.0
Elbert	+10.0

Change in the Rates of any Reported Poisoning Cases from 2012 to 2016 for Those Ages 12 to 25 (per 10,000 Persons Ages 12-24)

Change in poisonings per 10k pop. (2012 - 2016)

- -35 - -20
- -20 - -15
- -15 - -10
- -10 - -5
- -5 - 0
- 0 - 5
- 5 - 10
- 10 - 15
- 15 - 21

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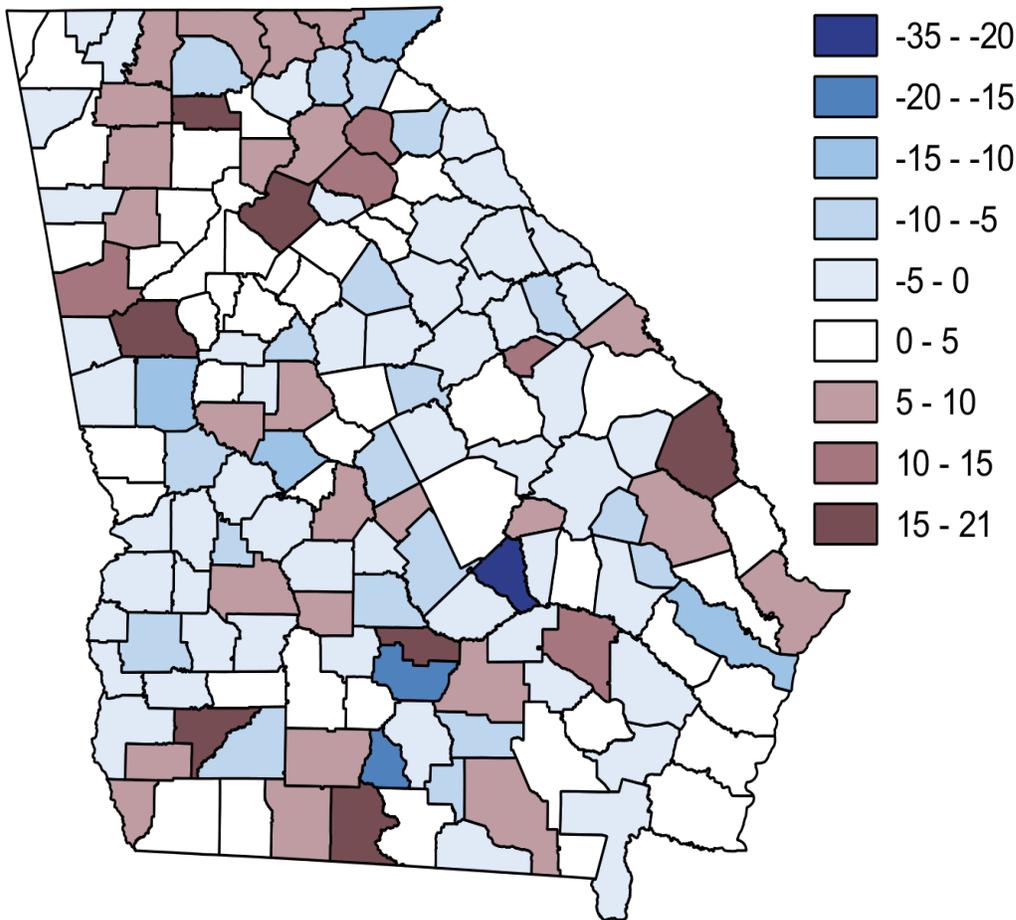
Opiate/Opioid Poisonings Findings

Most recent data

The statewide rate of reported opiate/opioid poisoning cases in 2016 (per 10,000 persons ages 12-25) was 1.2. The rate in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Opiate/Opioid Poisoning County		Opiate/Opioid Poisoning County	
Miller	19.01	Appling	5.56
Lanier	9.03	Toombs	5.01
Twiggs	8.33	Bleckley	4.88
Ben Hill	6.75	Coffee	4.25
Jeff Davis	6.52	Dawson	3.82

Rates of Opiate/Opioid Poisoning Cases in 2016 for Those Ages 12 to 25 (per 10,000 Persons Ages 12-24)

Opiate poisonings per 10k pop. (2016)

- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 5
- 5 - 10
- 10 - 19.5
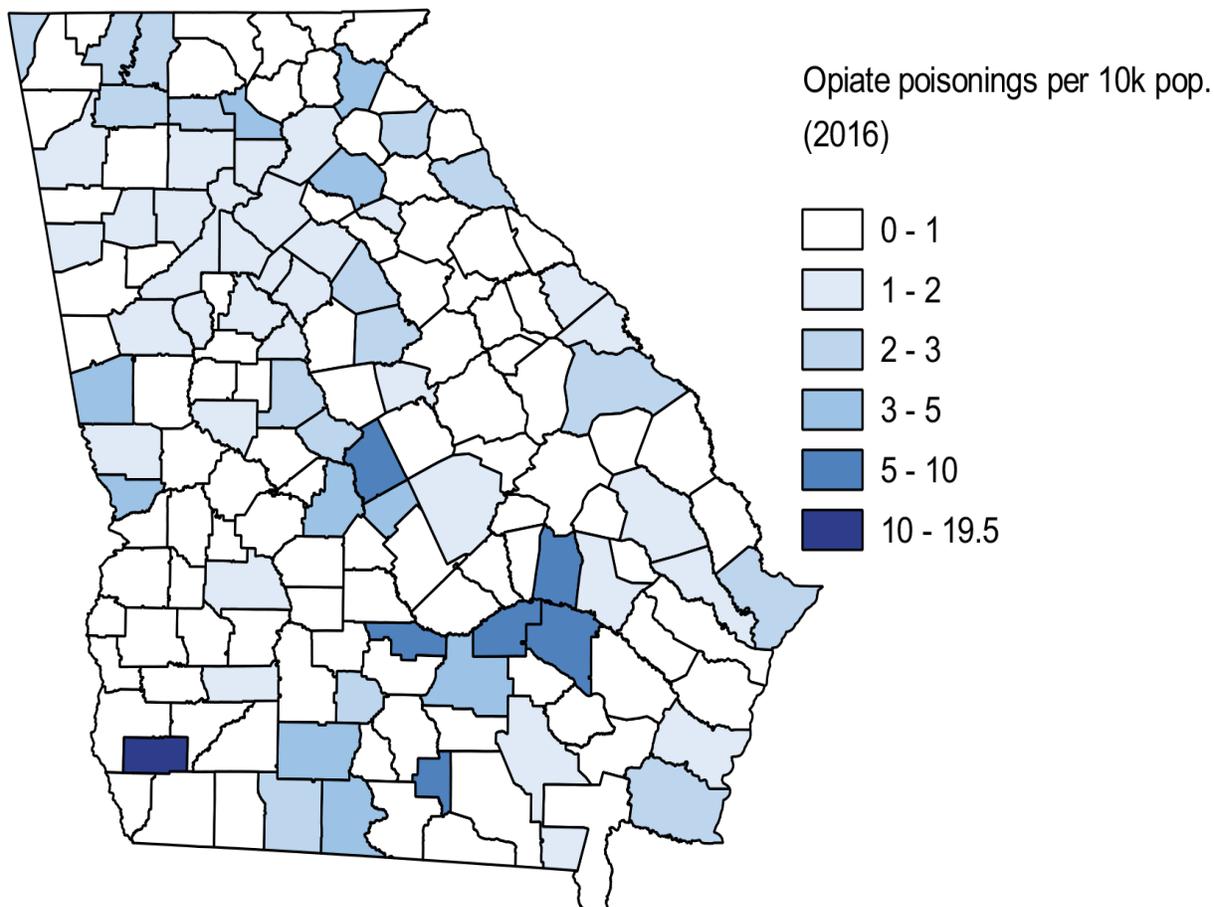
Change data

The rate change from 2012 to 2016 in each Georgia county is illustrated in the map below. The counties with the largest increase in poisoning rate were:

Opiate/Opioid Poisoning County	
Miller	19.01
Lanier	9.03
Twiggs	8.33
Ben Hill	6.75
Jeff Davis	6.52

Opiate/Opioid Poisoning County	
Appling	5.56
Bleckley	4.88
Dawson	3.82
Brooks	3.30
Coffee	3.19

Change in the Rates of Opiate/Opioid Poisoning Cases from 2012-2016 for Those Ages 12 to 25 (per 10,000 Persons ages 12-24)
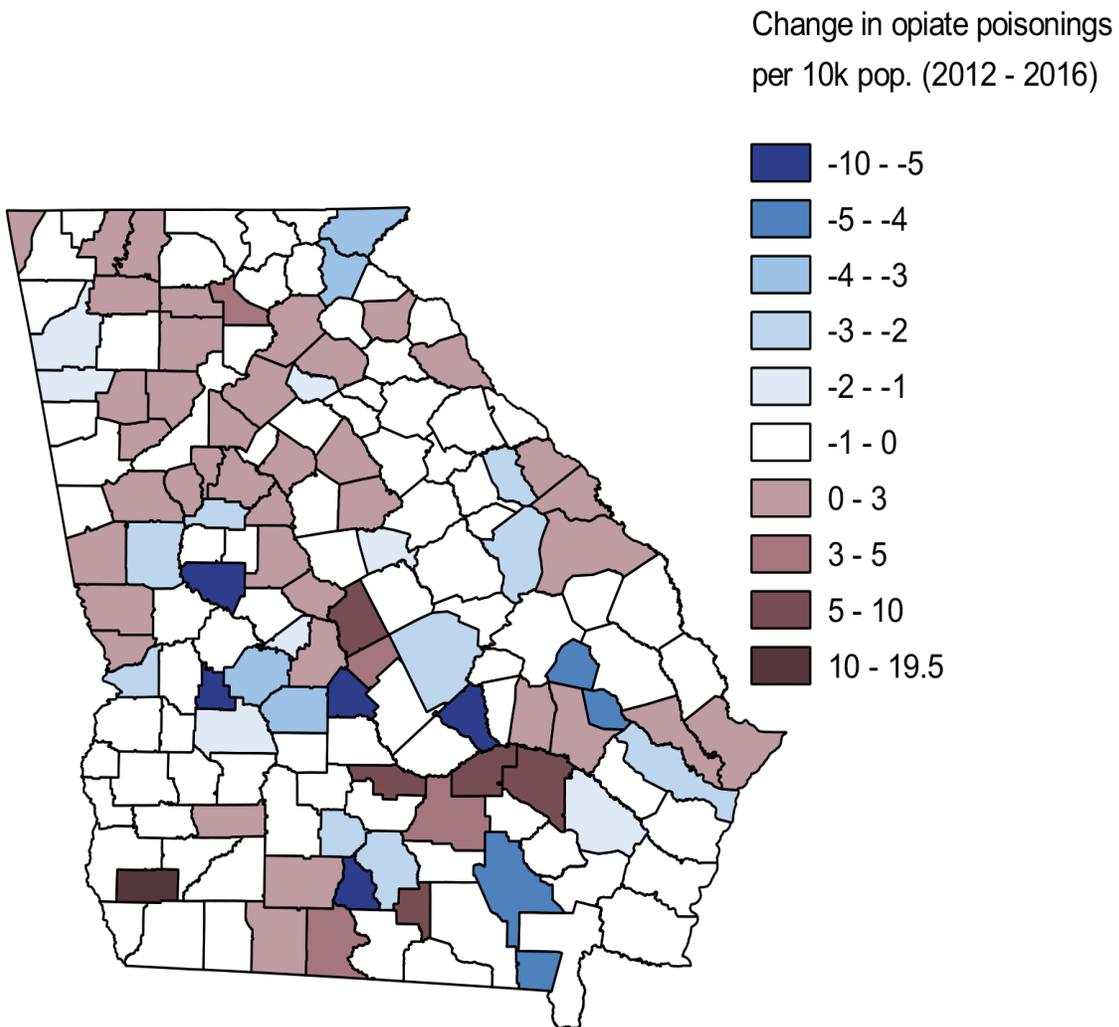
Change in opiate poisonings per 10k pop. (2012 - 2016)

- -10 - -5
- -5 - -4
- -4 - -3
- -3 - -2
- -2 - -1
- -1 - 0
- 0 - 3
- 3 - 5
- 5 - 10
- 10 - 19.5

Most recent data

The statewide rate of reported tranquilizer/sedative poisoning cases in 2016 (per 10,000 persons ages 12-25) was 4.0. The rate in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Tranquilizer/Sedative Poisoning County		Tranquilizer/Sedative Poisoning County	
Upson	16.85	Ware	13.77
Baker	15.77	Jackson	13.41
Ben Hill	15.74	Toombs	13.36
Pulaski	15.67	Dodge	12.88
Pickens	14.27	Floyd	11.62

Rates of Sedative Poisoning Cases in 2016 for Those Ages 12 to 25 (per 10,000 Persons Ages 12-24)
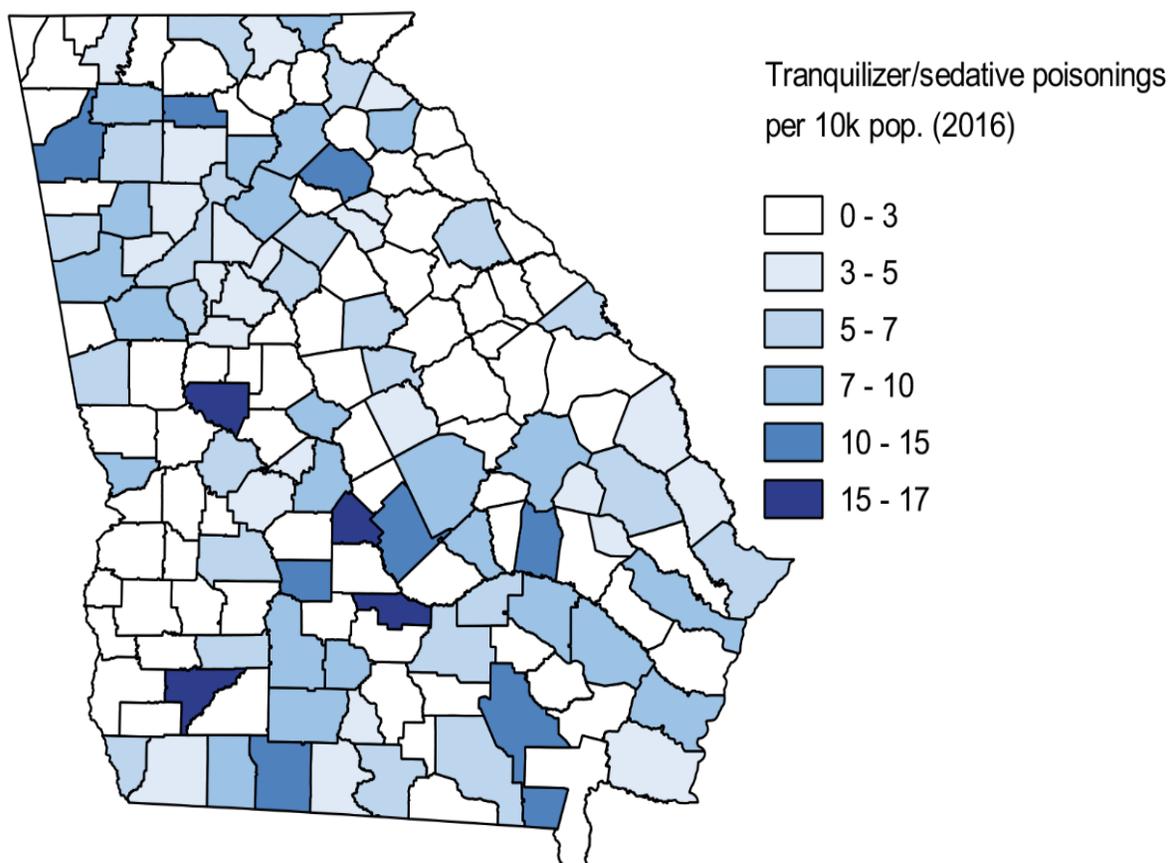
Tranquilizer/sedative poisonings per 10k pop. (2016)

- 0 - 3
- 3 - 5
- 5 - 7
- 7 - 10
- 10 - 15
- 15 - 17

Change data

The rate change from 2012 to 2016 in each Georgia county is illustrated in the map below. The counties with the largest increase in poisoning rate were:

Tranquilizer/Sedative Poisoning County	
Baker	15.77
Ben Hill	13.50
Jackson	11.92
Thomas	8.48
Pickens	8.15

Tranquilizer/Sedative Poisoning County	
Upson	7.49
Colquitt	6.13
Worth	6.13
Gwinnett	5.58
Appling	5.56

Change in the Rates of Tranquilizer/Sedative Poisoning Cases from 2012 to 2016 for Those Ages 12 to 25 (per 10,000 Persons ages 12-24)

Change in tranquilizer/sedative poisonings per 10k pop. (2012 - 2016)

- -12.5 - -7
- -7 - -5
- -5 - -4
- -4 - -3
- -3 - -2
- -2 - 0
- 0 - 5
- 5 - 10
- 10 - 13
- 13 - 16

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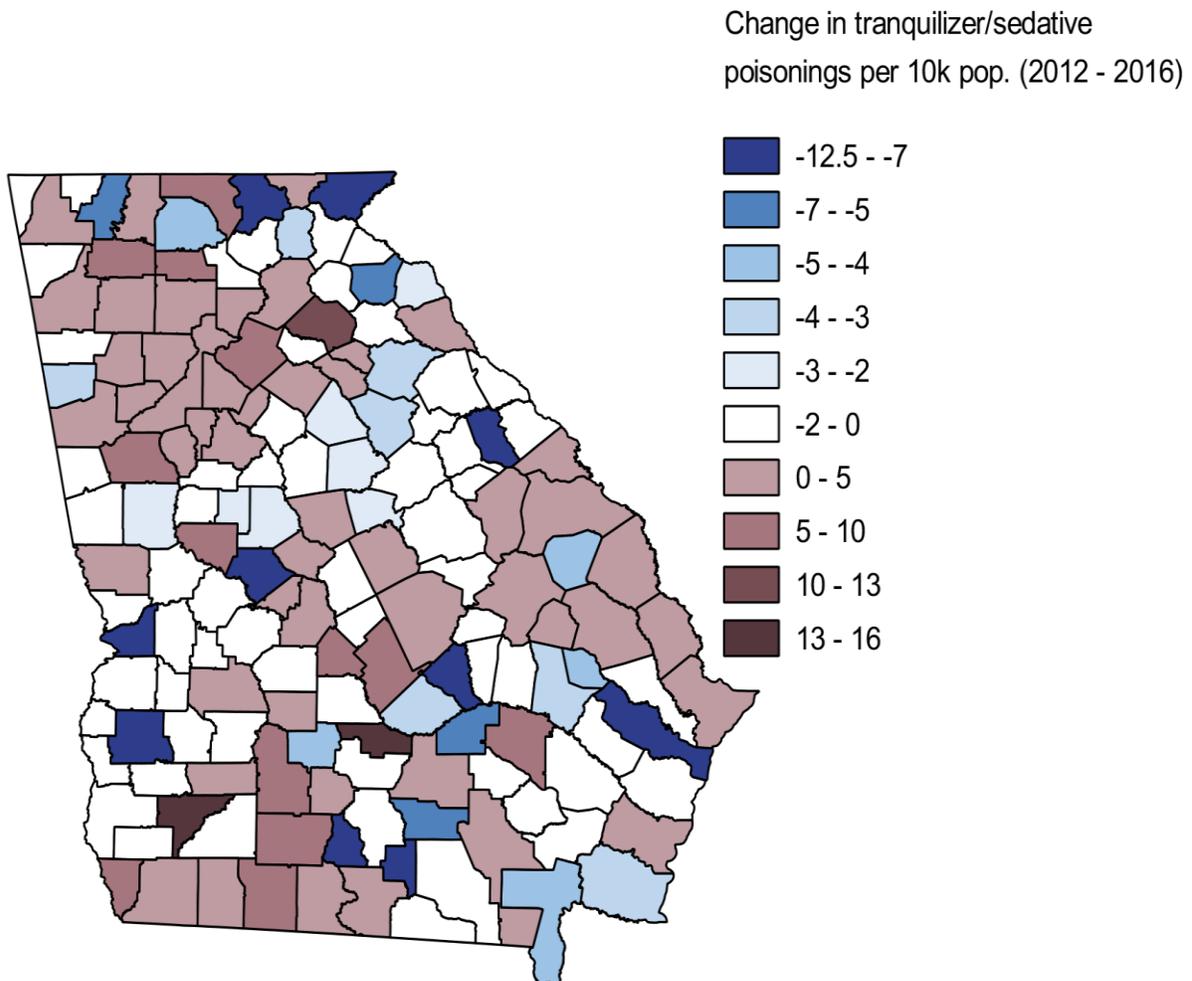
Stimulant Poisonings Findings

Most recent data

The statewide rate of reported stimulant poisoning cases in 2016 (per 10,000 persons ages 12-25) was 1.0. The rate in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Stimulant Poisoning County	
Evans	8.94
Irwin	7.98
Ben Hill	4.50
Charlton	4.21
Coweta	3.97

Stimulant Poisoning County	
Madison	3.94
Haralson	3.67
Forsyth	3.37
Liberty	3.35
Thomas	3.34

Rates of Stimulant Poisoning Cases in 2016 for Those Ages 12 to 25 (per 10,000 Persons Ages 12-24)

Stimulant poisonings per 10k pop. (2016)

- 0 - 2
- 2 - 3
- 3 - 4
- 4 - 6
- 6 - 8
- 8 - 9
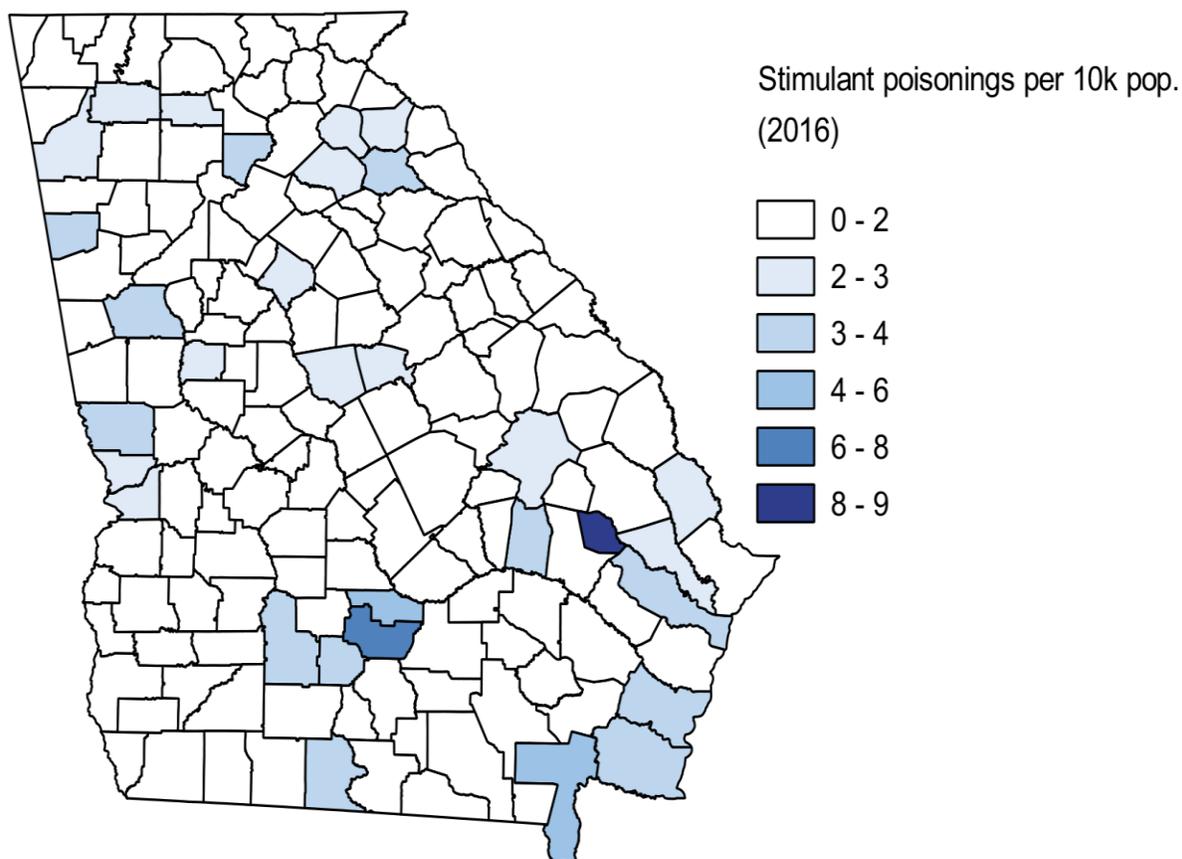
Change data

The rate change from 2012 to 2016 in each Georgia county is illustrated in the map below. The counties with the largest increase in poisoning rate were:

Stimulant Poisoning County	
Irwin	7.98
Evans	4.47
Charlton	4.21
Madison	3.94
Toombs	3.34

Stimulant Poisoning County	
Brooks	3.30
Harris	3.13
Worth	3.06
Tift	3.05
Jones	2.91

Change in Rates of Stimulant Poisoning Cases from 2012 to 2016 for Those Ages 12 to 25 (per 10,000 Persons ages 12-24)

Change in stimulant poisonings per 10k pop. (2012 - 2016)

-7.5 - -5
-5 - -4
-4 - -3
-3 - -2
-2 - -1
-1 - 0
0 - 3
3 - 5
5 - 7
7 - 8
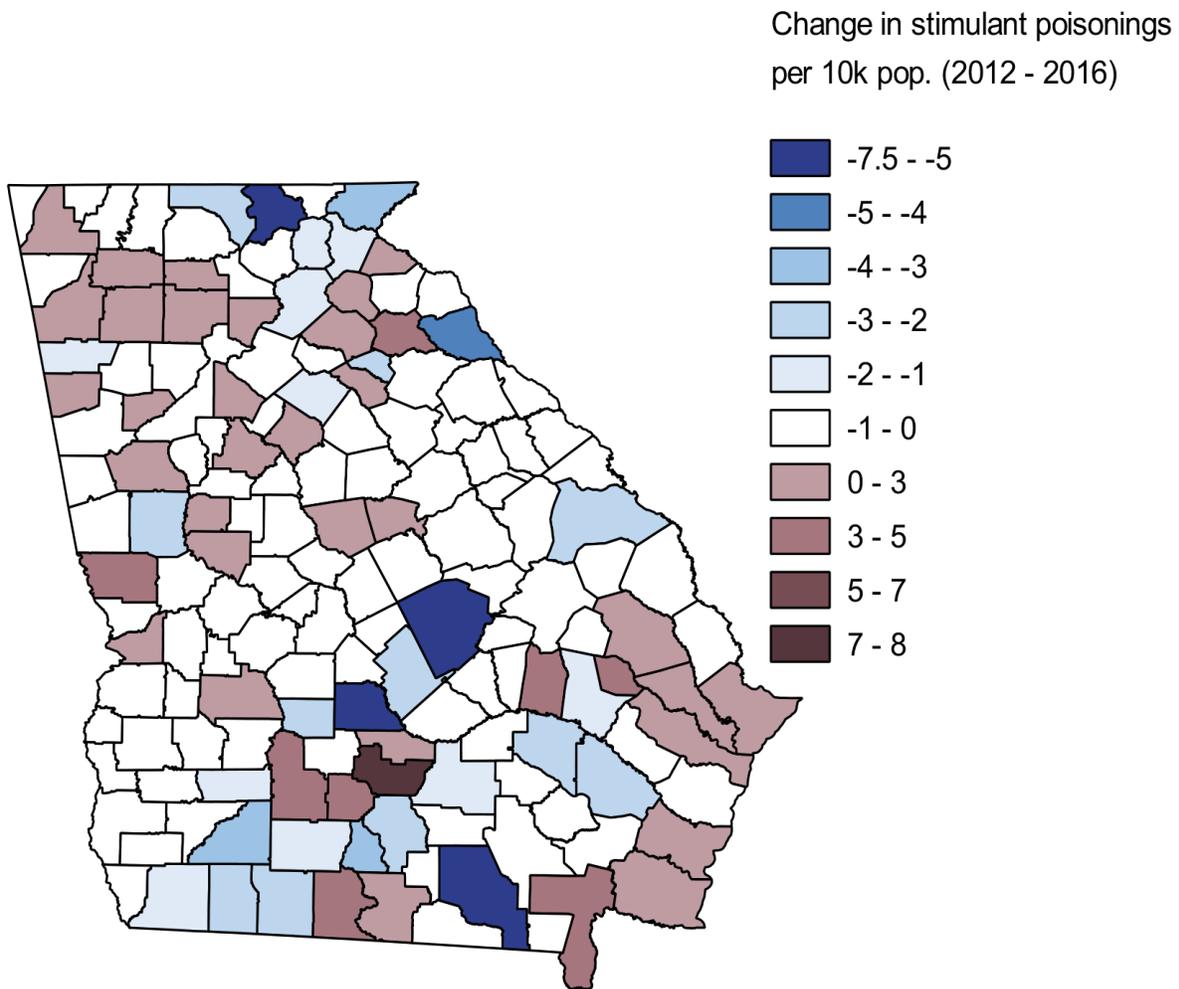
MEDICAL EXAMINERS DRUG OVERDOSE DATABASE

Medical Examiner (ME) data was provided for analysis covering the three years from 2014 through 2016. These data consisted of poisoning deaths due to one or more drugs discovered upon review of toxicology reports. Four counties in the metropolitan Atlanta area have their own medical examiner offices and generate their own reports: Cobb, DeKalb, Fulton, and Gwinnett Counties. Data from the remaining 153 counties are provided by the Georgia Bureau of Investigations (GBI) Medical Examiner's Office.

Issues Related to ME Data

Following are issues identified through an examination of these data:

- The data and data recording methods used by the non-GBI counties differ from one county to the next and often from year to year within a single county. It would also appear that different medical examiners within individual offices differ in how they characterize the results of toxicology findings. For instance, within a single county and year, some medical examiners attributed deaths generally to multiple substances or the toxic effects of opiates, while others will document every chemical compound present in the toxicology report. This degree of variability is much greater than that of the Computerized Criminal History (CCH) and National Seizure System (NSS) data, both of which systems are quite well standardized. This leaves much room for conjecture on the part of the analyst, which can in turn lead to inclusion of errors in the data.

- The frequency with which alcohol appears in the toxicology results appears to be somewhat low. The Blood Alcohol Content (BAC) and drug toxicology data (post-mortem) are analyzed separately and the findings constitute two separate GBI reports. It may be that, in some cases, the reports were not unified when returned to the ME, resulting in the possible underreporting of alcohol as a contributing factor.

- As data come in to the lab, findings are on occasion updated and amended. This process can occur weeks or even two months after the initial findings are communicated, resulting in amended reports. This would likely impact 2016 data, given the length of time required to perform multiple analyses to discern the polysubstance abuse that characterizes so many of the cases reviewed.

- There was a large portion of data that were missing and therefore unavailable for analysis, such as all individual-level data from Cobb County in 2015. Similarly, the state ME data for 2016 has not yet been finalized, due to the time it takes to finalize and report on results or multiple toxicology reports.

- The unit of analysis is the examiner's report of a finding of a particular chemical compound (either a drug or metabolite of a drug) on toxicology. Drugs differ significantly in terms of how quickly they metabolize and what metabolites are produced. As a result:
  - There is no way to know the relative contribution of any one drug in someone's death, sometimes even when that is the only substance identified in toxicology;
  - Some drugs can be obtained legitimately as well as illegitimately, and there is often no way of knowing which is which (e.g., fentanyl is prescribed as well as available from illicit manufacturers);
  - Many other extant groups (e.g., the Heroin Working Group out of the United States Attorney's Office in the Northern District of Georgia) include MEs. They are working with these data and their analysis should prevail given the direct involvement of medical examiners as part of the investigative and reporting processes;
  - The medical examiner data represent where someone died, rather than where they lived. We know that people often travel from their county of residence to acquire and use drugs, potentially resulting in their death in a county different from the one in which they resided; and
  - The decedents represent a group of poly-drug users, with drug combinations that include illicit as well as prescription drugs. They use drugs across many classes, rather than sticking to a single class or drug of choice.

- County level analyses result in small numbers. Even the largest counties have numbers in the tens each year, with many counties recording none over the course of three years.

Findings

For the above reasons, conducting and reporting of analyses at the individual county level can be misleading and lead to the potential of spurious conclusions being drawn from a rather limited and non-standardized dataset. It would be irresponsible to extend and provide conclusions beyond what the data will allow.

Therefore, limited state level findings are provided here, rather than county-by-county analysis results, for the four relevant drug classes (Central Nervous System (CNS) depressants, CNS stimulants, opioids, other prescription drugs). Even this presentation carries with it certain limitations, however, as it is based on incomplete data that has a great deal of variability in terms of how it is recorded, what is recorded, and what was

available for analysis at the time of this report. In fairness, this data is not designed for analytical purposes for and by researchers; but it does contain sensitive data that is designed to address the unique aspects of the factors and characteristics that contributed to the demise of people.

An examination of the 2016 data across all Georgia counties finds that, not surprisingly, the presence of prescription drugs was found on toxicology reports in the highest raw numbers within the metropolitan Atlanta area. Statewide, approximately 1,500 deaths evidenced the presence of one or more prescription drugs on toxicology results in 2016, keeping in mind the limitations to the data noted above. Prescription opiates accounted for the largest proportion, being present in 44% of these cases. This was followed by prescription depressants at 28%, other prescription drugs at 20%, and stimulants at just under 8%. These findings echo trends in Georgia and the rest of the United States, which is experiencing an unprecedented number of deaths associated with the abuse of prescription and illicit opioids. The presence of depressants, often referred to as sedatives and including the class of drugs known as benzodiazepines, has historically been responsible for a great many prescription drug overdoses, specifically when taken with alcohol (Jones, Paulozzi, & Mack, 2014).

GBI data for 153 of Georgia counties from 2014 and 2015 indicate that the average decedent was 42 years of age at the time of death, with a standard deviation of 12 years, 8 months. The ages of decedents in this sample ranged from two years to 79 years of age. In this sample, 55% were male, 91% were White or Caucasian, and the remaining 9% were Black. The death was ruled an accident in 92% of the cases, with suicide being the manner of death in 7% and homicide in slightly less than one half of one percent of the cases. The GBI data also contain a field that indicates whether the substances found on toxicology were illicit, prescription, or both. In 60% of cases the substances were described as prescription, with 29% noted as illicit, and 11% as both.

The demographic characteristics of decedents in the four large metropolitan Atlanta counties were very similar with respect to age, but reflected a smaller proportion of females (32% versus 45% in the GBI sample) and a smaller proportion of Whites (69% versus 91% in the GBI sample). The manner of death was virtually identical to the GBI data, with 93% of deaths being ruled accidental.

The most striking finding is the frequency of death related to polysubstance abuse. For example, of the 93 prescription drug-related deaths in one metropolitan Atlanta county in 2014, only four were the result of single as opposed to multiple drug toxicity. Of these four, three also tested positive for alcohol. The median number of prescription drugs identified through toxicology in this same sample was 3.0. The average number of

prescription drugs was 2.8 per individual, with and a standard deviation of 1.94. Findings indicate these individuals were also combining drugs across a great number of categories and classes, with toxicology results often noting the presence of opiates, CNS stimulants, CNS depressants, and alcohol at post mortem. It would therefore seem that the frequency of death attributed to multiple drug toxicities goes against the idea that these persons were simply overzealous in their use of a single drug of choice. Rather, **the data suggest that death due to multiple drug toxicities and use of a wide range of substances across drug categories is more the norm than the exception.** This has clear implications for the assessment and treatment of substance abuse in that it would be beneficial to assess for usage patterns that go beyond assumptions of a single drug of choice and that provide comprehensive treatment rather than treatment designed to address a specific class of drug.

NATIONAL SEIZURE SYSTEM

The National Seizure System (NSS) is a compendium of seizure information regarding drugs, weapons, chemicals, currency, and clandestine laboratory seizures. The NSS is managed by the Drug Enforcement Administration's El Paso Information Center (EPIC), which supports law enforcement efforts in the western hemisphere with a particular focus along the southwestern border of the United States. Seizure data is reported to EPIC by federal, state, and local law enforcement agencies (https://archives.fbi.gov/archives/news/pressrel/press-releases/fact-sheet-department-of-justice-efforts-to-combat-mexican-drug-cartels: accessed May 31, 2017).

Data Limitations

While this dataset contains a great deal of information on seizure of drugs and other items, it reflects local, national, and even international trends in drug trafficking as well as in focused interdiction efforts. As a result, the data may reflect law enforcement priorities and practices rather than the true nature of what and how much contraband is actually being trafficked. Finally, trafficking and law enforcement patterns impact seizure rates. Two factors, the presence of an interstate highway and specific interdiction efforts (e.g., Multijurisdictional Drug Task Forces), potentially impact seizure rates as well. Further, there were no demographic data about perpetrators.

Overview of Findings

NSS data analyzed for the purposes of this report consisted of records of drug seizures that occurred in Georgia from 2014 through 2016. Findings in this report section are cumulative for this three-year period; most recent year and change data are not presented here. The data included information regarding the date of the seizure, the

location of the seizure (county and city, where applicable), and information regarding the substance(s) seized (group, type, and amount). Ranks of all 159 Georgia counties for all variables are presented in Appendix C.

Given the focus of this inquiry on prescription drugs, seizures of other illicit drugs (e.g., methamphetamine, heroin) were excluded from the analyses. In addition to providing the total number of seizures of non-illicit drugs, the data were grouped by county and year of seizure. The substances were categorized according to four broad classes of substances, as follows:

- Central Nervous System Stimulants,
- Central Nervous System Depressants,
- Opioids, and
- Other Prescription Drugs.

The series of tables below provides drug class-specific data for the top ten counties over the years 2014 through 2016, ranked in decreasing order.

While the counties represented in the overall raw seizure numbers are predominantly metropolitan Atlanta counties, Whitfield and Carroll counties are notable exceptions. Both counties are, however, bisected by major interstates (I-75 and I-20, respectively) and both share a border with an adjacent state (Tennessee and Alabama, respectively). Carroll County is also home to a Multijurisdictional Drug Task Force (MJDTF), denoting a specific focus on drug interdiction in that community.

Of all counties represented in the top ten for each drug class seizure (by incidence rates rather than raw frequencies), only Brantley, Habersham, Heard, Rabun, Taylor, and Ware counties have neither an interstate highway nor an MJDTF. With the exception of Habersham and Ware counties, these are also very small population counties. Brantley County is, however, within ten miles of I-95, a major drug trafficking route. Heard County is located between I-20 and I-85, and Taylor County is located between Columbus (GA) and I-75.

The number of total drug seizures in each Georgia county is illustrated in the map below. The counties with the highest numbers were:

Total Drug Seizures County	
Gwinnett	3433
Cobb	3344
Fulton	3187
Carroll	1790
Whitfield	1787

Total Drug Seizures County	
Cherokee	1662
Hall	1518
Richmond	1478
Muscogee	1443
DeKalb	1303

Total Number of All Drug Seizures

Total seizures (2014 - 2016)

- 0 - 50
- 50 - 100
- 100 - 150
- 150 - 350
- 350 - 800
- 800 - 1250
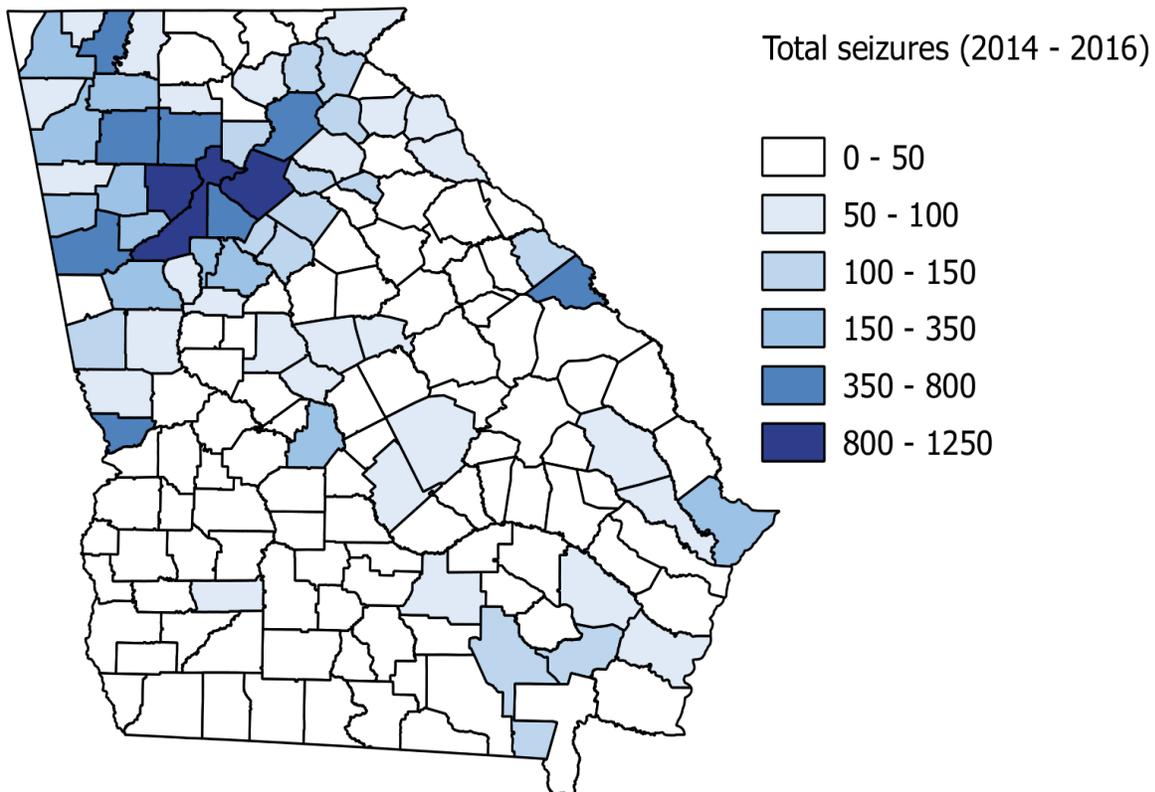
CNS Stimulant Seizures Findings

The number of CNS stimulant seizures in each Georgia county is illustrated in the map below. The counties with the highest numbers were:

CNS Stimulant Seizures County	
Cobb	1297
Gwinnett	963
Whitfield	876
Cherokee	781
Carroll	744

CNS Stimulant Seizures County	
Fulton	665
Bartow	637
Hall	617
Paulding	616
Muscogee	569

Total Number of Stimulant Seizures

Total stimulant seizures (2014 - 2016)

	0 - 100
	100 - 200
	200 - 300
	300 - 500
	500 - 700
	700 - 1300
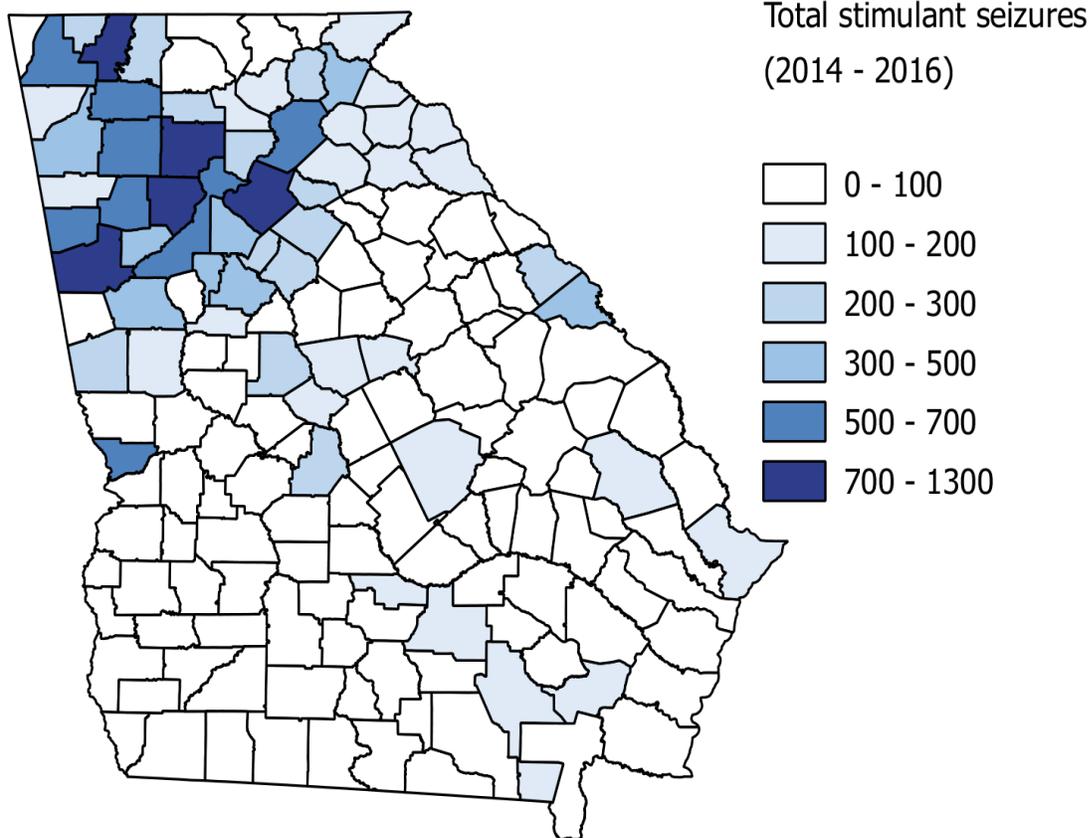
CNS Depressant Seizures Findings

The number of CNS depressant seizures in each Georgia county is illustrated in the map below. The counties with the highest numbers were:

CNS Depressant Seizures County	
Fulton	702
Gwinnett	439
Cobb	431
Hall	239
Richmond	236

CNS Depressant Seizures County	
Chatham	186
Cherokee	176
DeKalb	165
Floyd	153
Carroll	146

Total Number of Depressant Seizures

Total seizures of depressants
(2014 - 2016)

- 0 - 50
- 50 - 100
- 100 - 200
- 200 - 400
- 400 - 600
- 600 - 750
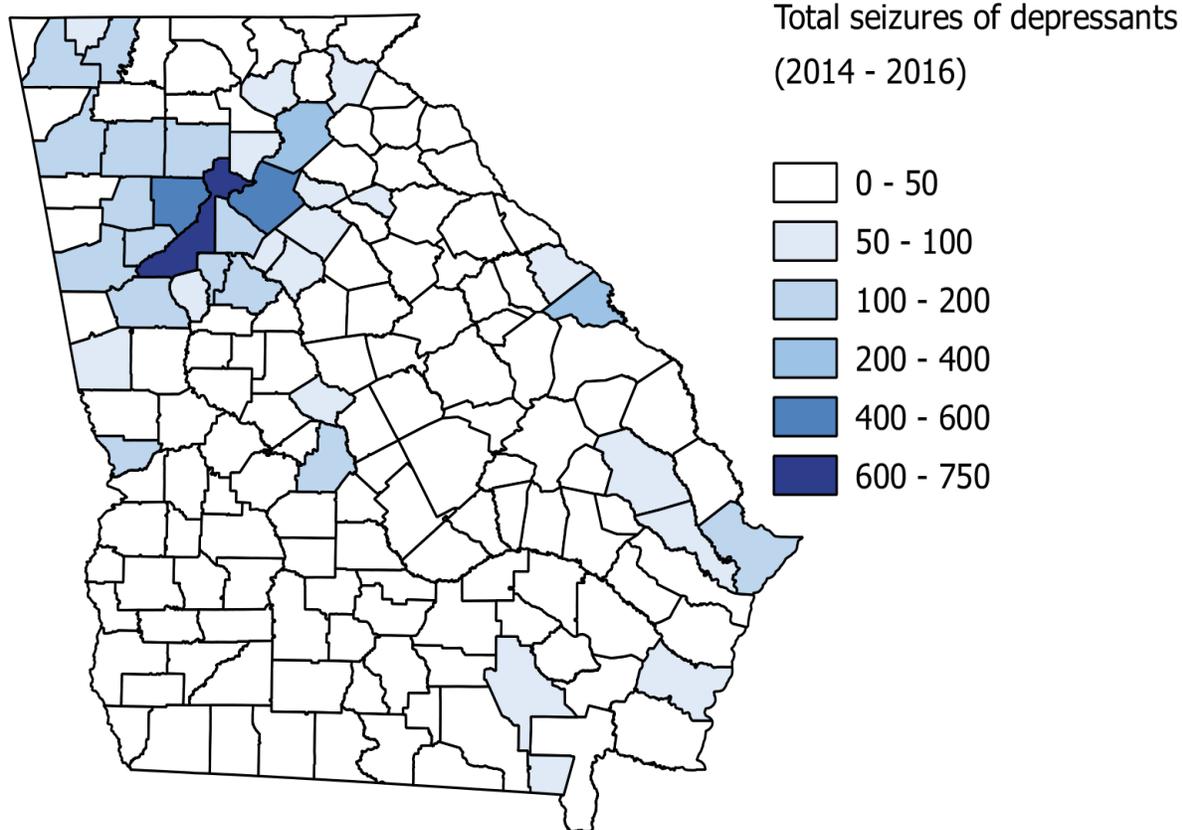
Opioid Seizures Findings

The number of opioid seizures in each Georgia county is illustrated in the map below.
The counties with the highest numbers were:

Opioid Seizures County		Opioid Seizures County	
Fulton	717	Cherokee	340
Cobb	559	Whitfield	339
Gwinnett	422	Hall	317
Richmond	411	Walker	291
Carroll	351	Chatham	289

Total Number of Opioid Seizures

Total opioid seizures
(2014 - 2016)

- 0 - 50
- 50 - 100
- 100 - 200
- 200 - 400
- 400 - 600
- 600 - 750
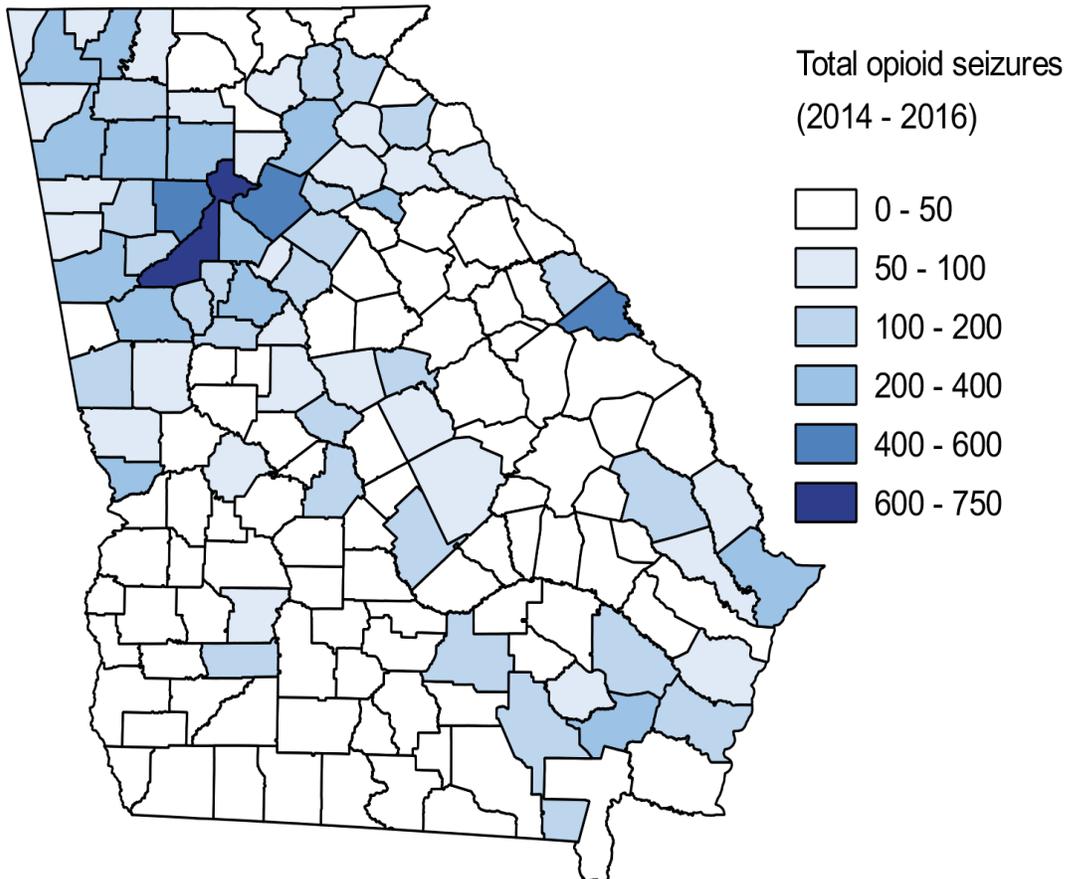
The number of other prescription medication seizures in each Georgia county is illustrated in the map below. The counties with the highest numbers were:

Other Prescription Medication Seizures County		Other Prescription Medication Seizures County	
Gwinnett	1608	Richmond	461
Fulton	1103	Whitfield	458
Cobb	1055	DeKalb	384
Carroll	549	Cherokee	365
Muscogee	461	Chatham	359

Total Number of Other Prescription Medication Seizures

Total seizures of other prescription drugs (2014 - 2016)

- 0 - 50
- 50 - 100
- 100 - 250
- 250 - 400
- 400 - 800
- 800 - 1650
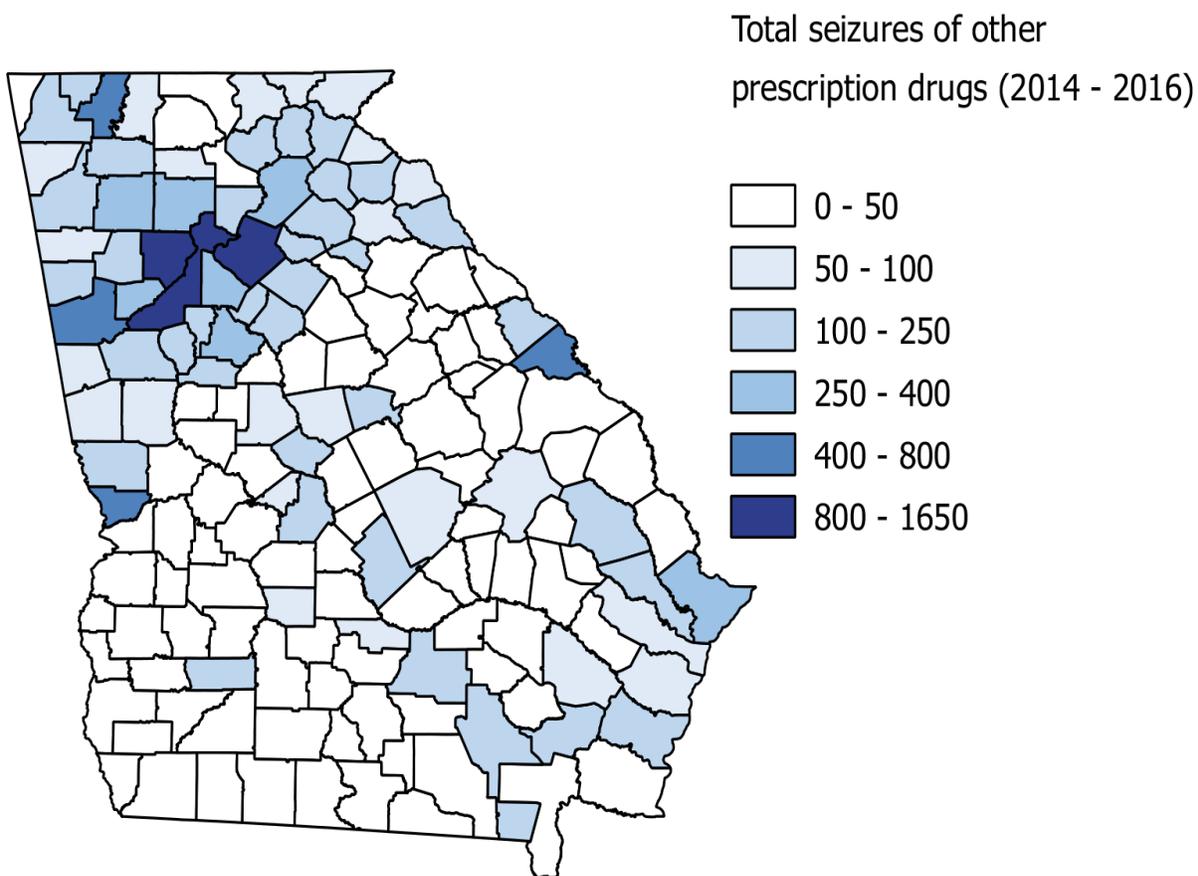
In addition to examining the overall frequencies by county, 2015 Census estimates were used to arrive at three-year incidence rates (by incidence per 100,000). To calculate three-year incidence rates, the total number of seizures (2014 – 2016) were used as the numerator and the 2015 county Census estimates were used as the denominator and the result was multiplied by 100,000. The results of which are displayed in the below tables. MJDTF denotes the presence of a "Multijurisdictional Drug Task Force" in the county.

Total Drugs Seizure Rates Findings

The seizure rate for all drugs (by incidence per 100,000) in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Total Drug Seizures 2014 – 2016

County	N	2015 Population	Incidence	Interstate	MJDTF
Brantley	611	18,517	3299.7	None	No
Haralson	853	28,869	2954.7	I-20	Yes
Banks	501	18,586	2695.5	I-85	No
McIntosh	224	8,680	2580.6	I-95	No
White	658	28,246	2329.5	None	Yes
Miller	137	5,928	2311.1	None	Yes
Seminole	185	8,951	2066.9	None	Yes
Rabun	305	16,320	1868.8	None	No
Heard	217	11,630	1865.9	None	No
Elbert	344	19,537	1760.8	None	Yes

Rates for All Drug Seizures

Total seizures per 100k pop.
(2014 - 2016)

- 0 - 500
- 500 - 1000
- 1000 - 1500
- 1500 - 2000
- 2000 - 2500
- 2500 - 3300
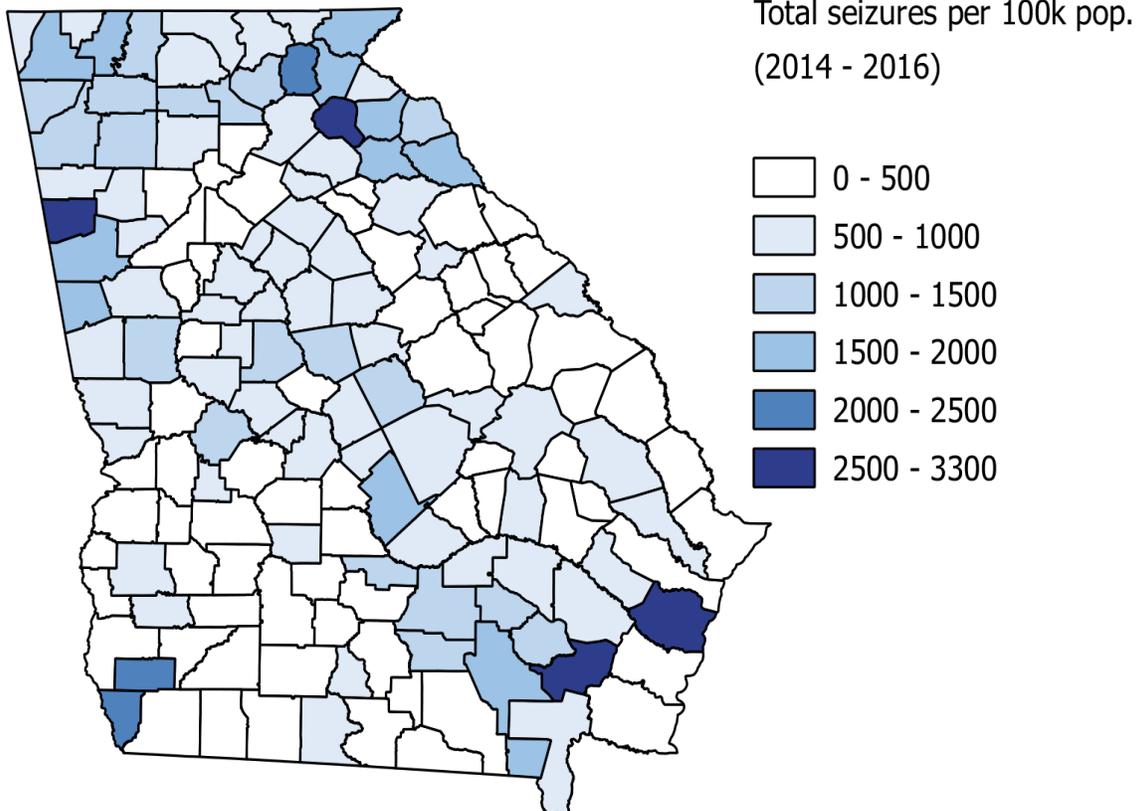
CNS Stimulant Seizure Rates Findings

The seizure rate for CNS stimulants (by incidence per 100,000) in each Georgia county is illustrated in the map below. The counties with the highest rates were:

CNS Stimulant Seizures 2014 – 2016

County	N	2015 Population	Incidence	Interstate	MJDTF
Haralson	547	28,869	1894.8	I-20	Yes
White	298	28,246	1055.0	None	Yes
Banks	194	18,586	1043.8	I-85	No
Gordon	560	56,865	984.8	I-75	No
Brantley	181	18,517	977.5	None	No
Seminole	80	8,951	893.8	None	Yes
Rabun	142	16,320	870.1	None	No
Whitfield	876	104,496	838.3	I-75	No
Habersham	346	44,193	782.9	None	No
Madison	109	13,937	782.1	None	Yes

Rates for Stimulant Seizures

Stimulant seizures
(rate per 100k pop.; 2014 - 2016)

- 0 - 100
- 100 - 200
- 200 - 500
- 500 - 750
- 750 - 1250
- 1250 - 1900
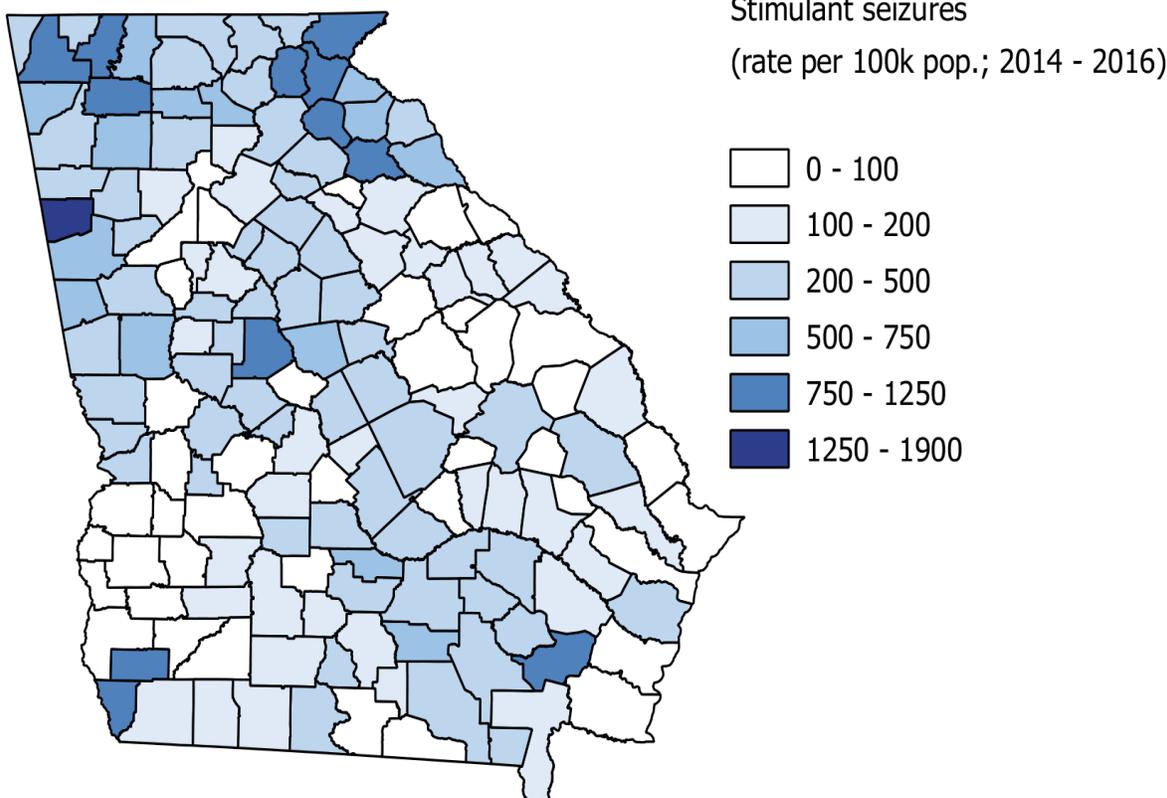
CNS Depressant Seizure Rates Findings

The seizure rate for CNS depressants (by incidence per 100,000) in each Georgia county is illustrated in the map below. The counties with the highest rates were:

CNS Depressant Seizures 2014 – 2016

County	N	2015 Population	Incidence	Interstate	MJDTF
Heard	42	11,630	361.1	None	No
McIntosh	25	8,680	288.0	I-95	No
Seminole	25	8,951	279.3	None	Yes
Brantley	40	18,517	216.0	None	No
Twiggs	18	8,337	215.9	I-16	No
Habersham	92	44,193	208.2	None	No
Lumpkin	61	31,701	192.4	None	Yes
Wilkinson	17	9,423	180.4	None	Yes
Peach	47	27,214	172.7	I-75	No
Ware	58	35,911	161.5	None	No

Rates for Depressant Seizures

Depressant seizures per 100k pop. (2014 - 2016)

- 0 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- 200 - 300
- 300 - 375
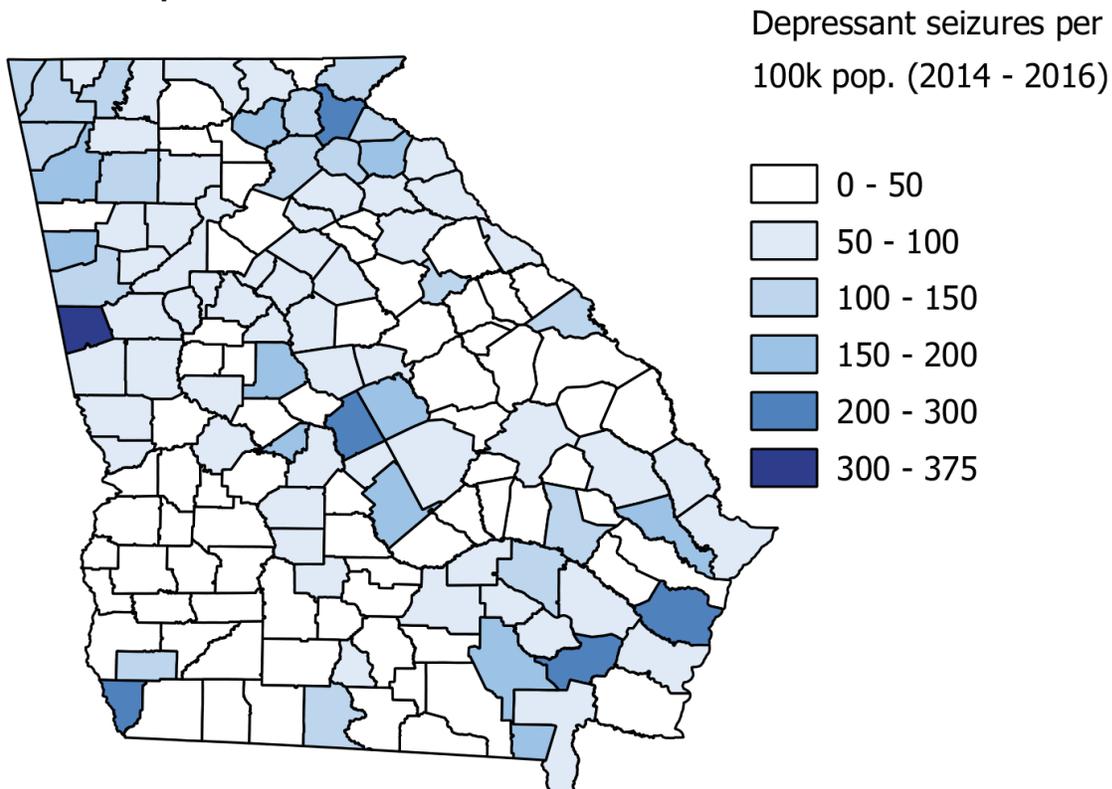
Opioid Seizure Rates Findings

The seizure rate for opioids (by incidence per 100,000) in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Opioid Seizures 2014 – 2016

County	N	2015 Population	Incidence	Interstate	MJDTF
Brantley	201	18,517	1085.5	None	No
McIntosh	79	8,680	910.1	I-95	No
Taylor	59	8,371	704.8	None	No
Miller	38	5,928	641.0	None	Yes
Wilkinson	52	9,423	551.8	None	Yes
Ware	198	35,911	551.4	None	No
Dodge	113	21,257	531.6	None	Yes
Randolph	36	7,076	508.8	None	Yes
Franklin	102	22,282	457.8	I-85	Yes
Elbert	89	19,537	455.6	None	Yes

Rates for Opioid Seizures

Opioid seizures (rate per 100k pop.; 2014 - 2016)

- 0 - 100
- 100 - 200
- 200 - 300
- 300 - 400
- 400 - 800
- 800 - 1100
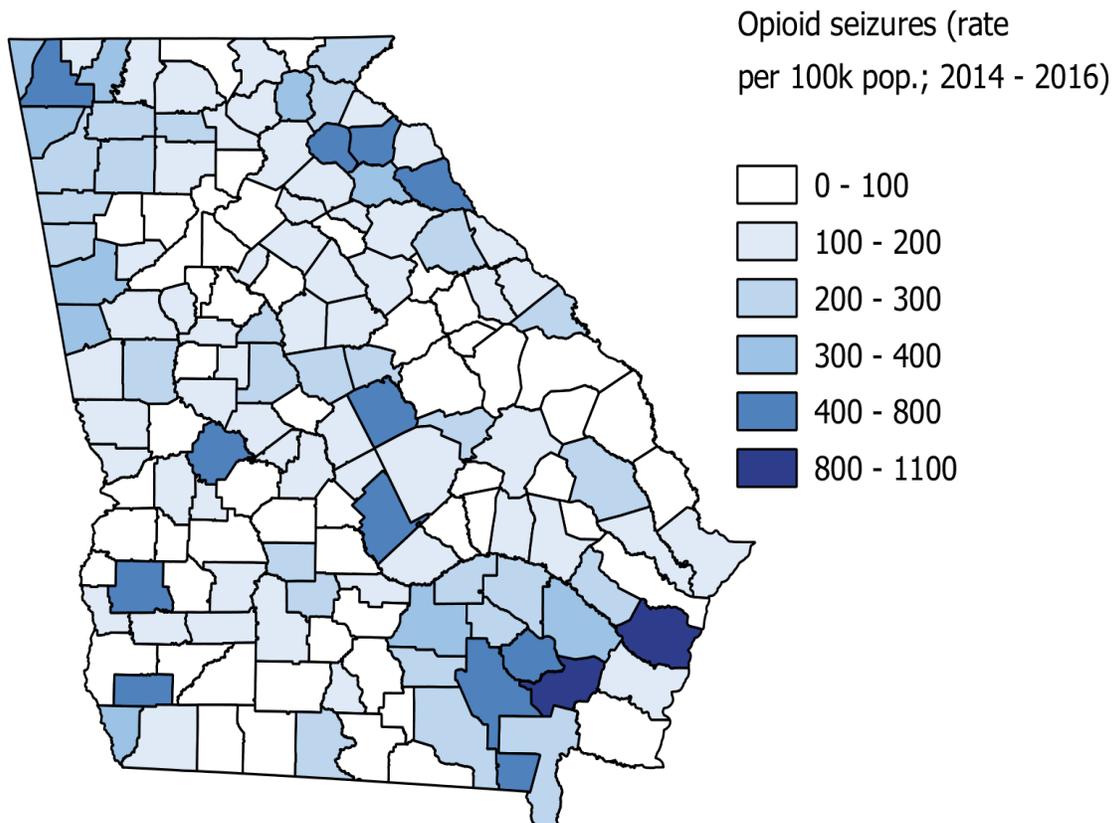
Other Prescription Medication Seizure Rates Findings

The seizure rate for other prescription medications (by incidence per 100,000) in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Other Prescription Medication Seizures 2014 – 2016

County	N	2015 Population	Incidence	Interstate	MJDTF
Banks	200	18,586	1076.1	I-85	No
Brantley	189	18,517	1020.7	None	No
McIntosh	87	8,680	1002.3	I-95	No
White	226	28,246	800.1	None	Yes
Miller	45	5,928	759.1	None	Yes
Elbert	122	19,537	624.5	None	Yes
Haralson	177	28,869	613.1	I-20	Yes
Rabun	100	16,320	612.7	None	No
Heard	70	11,630	601.9	None	No
Towns	66	10,968	601.7	None	Yes

Rates for Other Prescription Medication Seizures

Other prescription drug seizures per 100k pop. (2014 - 2016)

- 0 - 100
- 100 - 200
- 200 - 300
- 300 - 500
- 500 - 700
- 700 - 1100
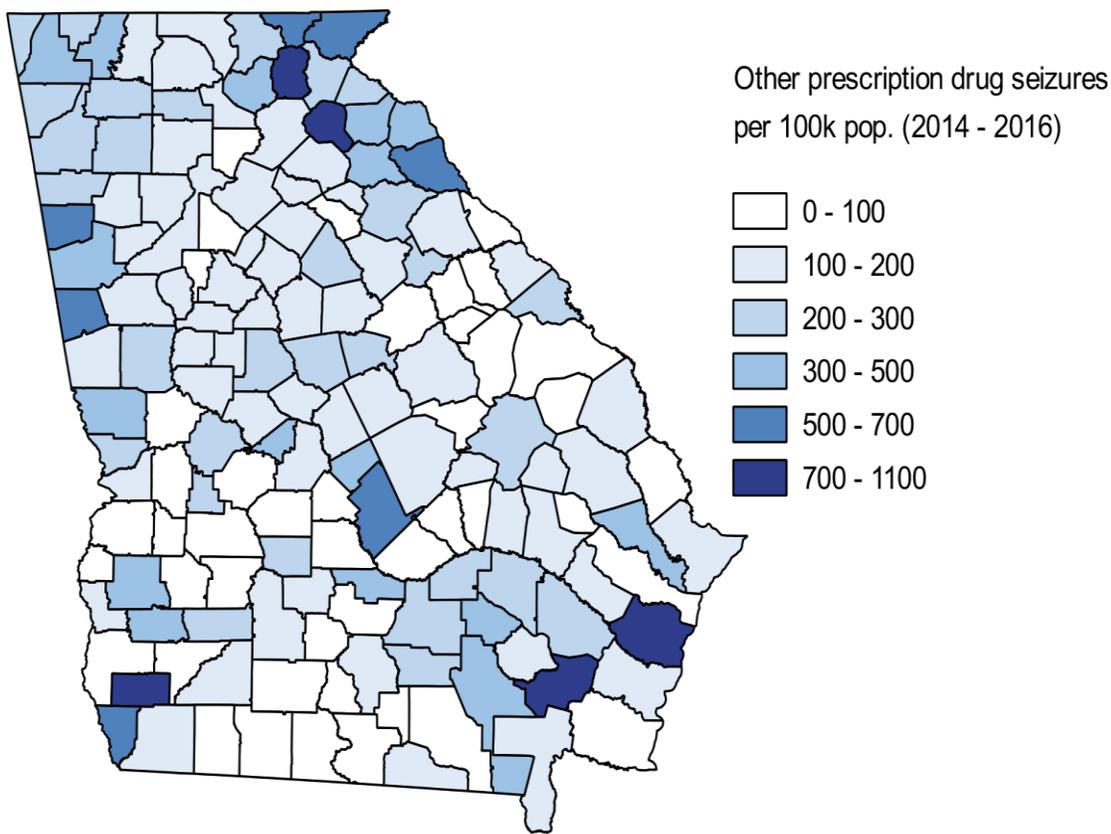
GEORGIA PDMP

PDMP data at the county level for most years and all but one set of PDMP variables were not available for analysis and inclusion in this report. The one variable set provided was related to opioid/opiate "narcotic" prescriptions dispensed in each Georgia county from July 1, 2015 through June 30, 2016. Included in this dataset were the total number of opioid/opiate prescriptions recorded in the PDMP as dispensed, the total number of retail permits reporting to the PDMP, and the ratio of prescriptions per person based on the county's 2016 population. Ranks of all 159 Georgia counties are presented in Appendix D.

Findings

The counties with the highest ratio during this one-year period were:

Ratio of Narcotic Prescriptions Dispensed Per Person County		Ratio of Narcotic Prescriptions Dispensed Per Person County	
Bacon	2.1	Polk	1.9
Elbert	2.0	Jeff Davis	1.8
Clinch	2.0	Haralson	1.8
Seminole	2.0	Irwin	1.8
Candler	1.9	Ben Hill	1.7

Ratio of Narcotic Prescriptions Dispensed Per Person

77
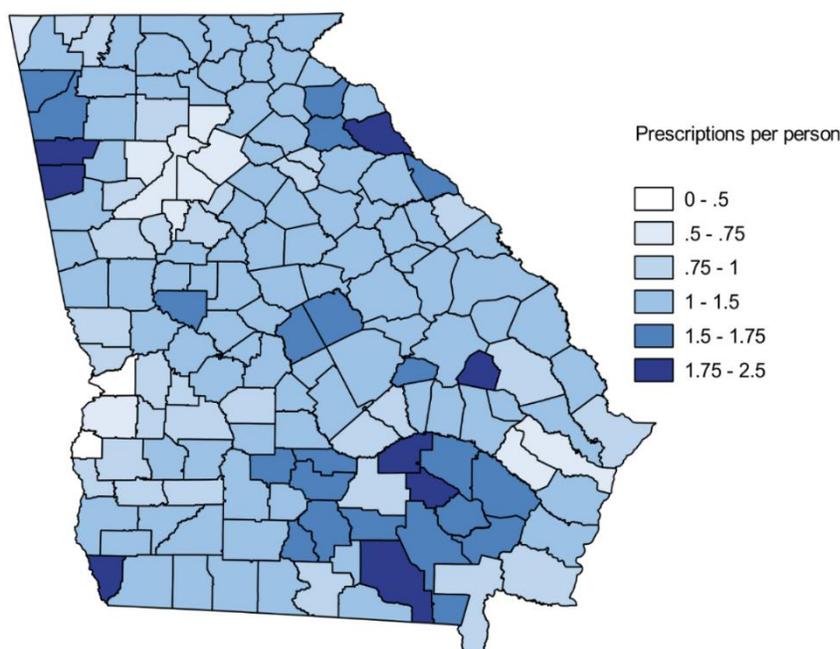
Rationale

As mentioned in the overall introduction, this assessment was commissioned by DBHDD, OBHP as part of the first phase of the "Georgia Strategic Prevention Framework Rx (SPF-Rx)" Project. Findings will be used to inform the creation of the SPF-RX strategic plan for the five-year project by October 31, 2017. The strategic plan will feature five "high need" geographic areas in Georgia where the SPF-Rx will be implemented over the four remaining grant years. This assessment was commissioned, in part, to assist with identification of the five areas.

Methods

Selection of databases to include in analysis
Two of the databases featured earlier in this report were selected for inclusion in this analysis, primarily on the criterion that of all available data they most likely contain valid indications of where in Georgia prescription drugs are recently being abused and misused. They are the *Georgia Student Health Survey* and the *National Poisoning System* data.

Other datasets were considered but eventually rejected due to prohibitive concerns about criterion validity:

- As described in detail above, there are many concerns about reliability of *Medical Examiner Drug Overdose* data from county to county, each with its own medical examiner(s), across Georgia. Coroners' reports were also considered but deemed even less reliable.

- Also, as described above, *National Drug Seizure System* data are likely valid indicators of local, national, and even international trends in trafficking and interdiction efforts, but less valid indicators of actual abuse and misuse by location. These data likely reflect law enforcement priorities and practices, as well as the presence of trafficking routes such as interstate highways, rather than the true nature of what and how much contraband is being consumed in a given county. *Computerized Criminal History* data is prone to these same concerns. Further, these data do not contain specific variables, such as the type of drug required for the analysis described below in "methods."

PDMP data would likely meet the criterion but the specific variables required for analysis could not be obtained. Other datasets, including *hospital discharges* and

emergency room visit discharges, would also very likely meet the criterion. These data are currently being compiled by the Georgia Department of Public Health and were not ready for inclusion in this analysis. It is possible that *DBHDD treatment episode* data, also not currently available, would be appropriate as well.

As this data become available, it is strongly recommended that all data meeting the criterion be re-analyzed, preferably before a final strategic plan is created for the Georgia Strategic Prevention Framework Rx project and the state is committed to implementation in five specific communities.

Analysis methods

The assessment team worked with the DBHDD staff to identify the most appropriate variables for inclusion in the analysis. It was decided to use rates instead of total numbers so that all Georgia counties would be considered. (Using total numbers would heavily weight populous, urban counties.) The following 12 variables from the *Georgia Student Health Survey* and the *National Poisoning System* databases were identified:

1. Students' self-reported painkiller use in the most recent year (2016).
2. Students' self-reported painkiller use change from the first available year (2015) to the most recent year (2016).
3. Students' self-reported tranquilizer/sedative use in the most recent year (2016).
4. Students' self-reported tranquilizer/sedative use change from the first available year (2015) to the most recent year (2016). [**Note:** While data were available from earlier years for tranquilizer/sedative and stimulant use, it was decided to use a standard time frame for all three GSHS change variables. Earliest available data for painkiller use were from 2015.]
5. Students' self-reported stimulant use in the most recent year (2016).
6. Students' self-reported stimulant use change from the first available year (2015) to the most recent year (2016).
7. Poisoning by opiate/opioid in the most recent year (2016).
8. Poisoning by opiate/opioid change from the first available year (2012) to the most recent year (2016).
9. Poisoning by tranquilizer/sedative use in the most recent year (2016).
10. Poisoning by tranquilizer/sedative use change from the first available year (2012) to the most recent year (2016).
11. Poisoning by stimulant use in the most recent year (2016).
12. Poisoning by stimulant use change from the first available year (2012) to the most recent year (2016).

Every county for which data were available was then ranked from 1 to 159 for each of these 12 variables. An average of the twelve rank scores was then calculated to

produce the final composite rankings. This method is recommended by Ghiselli, Campbell and Zedeck (1980) for constructing composite variables when component variables are assumed to be equally important. The text states:

> "If we wish to consider the various criteria as being of equal importance…the common procedure is to transmute the scores on each of the component criteria to standard or standardized scores…. [which are then] summed or averaged. (1980, p.292)."

Composite rank scores of all 159 Georgia counties are presented in Appendix E.

Other methods were considered (e.g., using the slope of the regression line across all available years instead of the change from first to last year, which would only have been feasible for poison data) but this was ultimately rejected in favor of the more straightforward, understandable, and generally accepted method.

It is recommended that these rankings, even if additional datasets become available and are included in re-analysis, be only one factor in determining the final five high need areas for the SPF Rx Project.

The average rank across the 12 variables of each Georgia county is illustrated in the map below. The number 1 represents the worst rank (i.e., Ben Hill, with an average rank of 25.9 across the 12 variables) and 159 represents the best rank. The counties with the worst average ranks were:

County	Average Rank		County	Average Rank
1. Ben Hill	25.9		6. Coweta	44.3
2. Colquitt	28.1		7. Franklin	45.2
3. Pickens	38.2		8. Paulding	46.6
4. Bryan	40.0		9. Sumter	48.0
5. Putnam	43.0		10. Cherokee	48.1

High Need County Ranks

Ranked overall need
(higher = lower need)

■	1 - 16
■	16 - 32
■	32 - 48
■	48 - 74
□	74 - 90
■	90 - 106
■	106 - 128
■	128 - 144
■	144 - 149
■	149 - 159
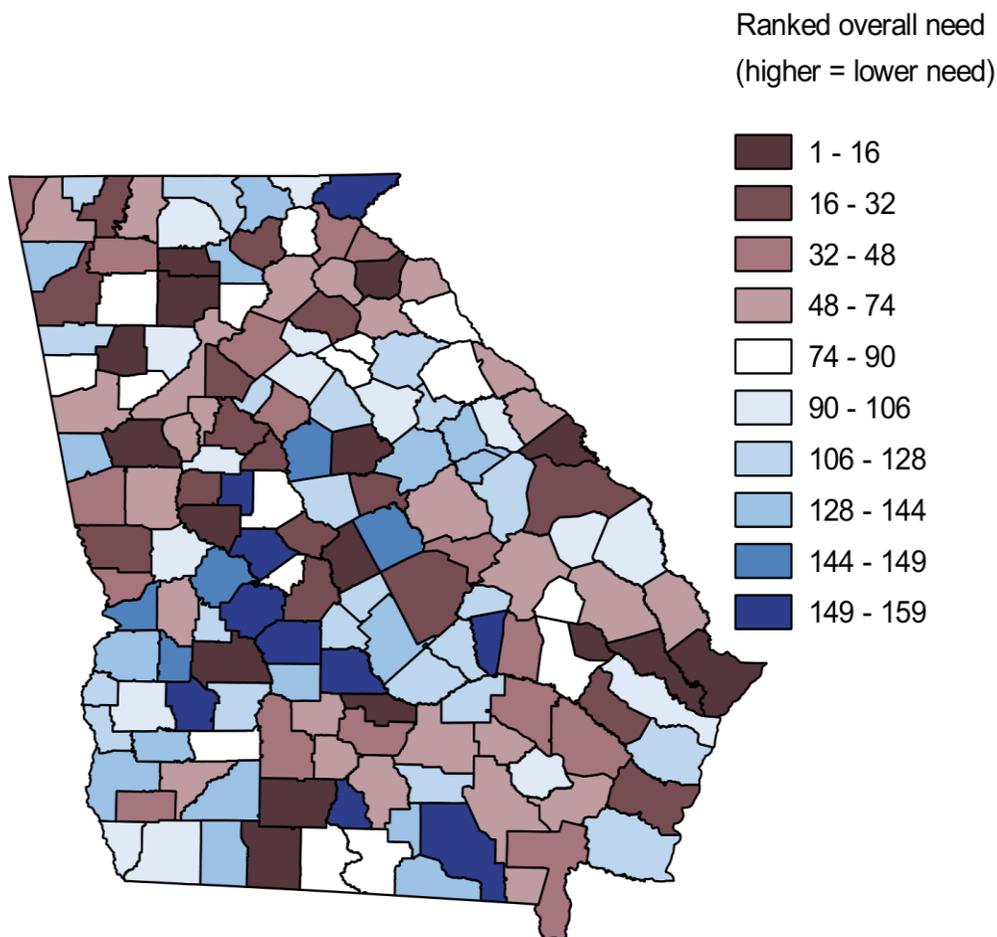
For the purpose of identifying five high need "areas," in contrast to "counties," in which to implement the SPF Rx project, notice several small clusters of adjoining counties with problematic ranks:

- In northwest Georgia: Pickens, Cherokee and Paulding Counties;
- In west central Georgia: Coweta, Pike and Upson Counties;
- In southeast Georgia: Chatham, Bryan and Evans Counties; and
- In southwest Georgia: Thomas and Colquitt Counties.

UNDERAGE DRINKING IN GEORGIA

INTRODUCTION

Three databases were examined to determine the prevalence of underage drinking in Georgia:

- The ***Georgia Student Health Survey*** (see page 39 for a description of this database,) Ranks of all 159 Georgia counties are presented in Appendix A.
- The ***National Poisoning Data System*** (see page 48 for a description of this database) and Ranks of all 159 Georgia counties are presented in Appendix B.
- The ***Computerized Criminal History System*** (see page 86 for a description of this database.) Ranks of all 159 Georgia counties are presented in Appendix F.

As stated in the "Prescription Drug Abuse and Misuse, Prevalence and Trends in Georgia" section of this report, **hospital and emergency room visit discharge data, and possibly treatment episode data, would be valuable additions to this analysis. It is strongly recommended that these databases be included as they become available for future analyses.**

Alcohol Use Findings

Most recent data

Statewide in 2016, 9.9% of students reported drinking alcohol during the past 30 days. The percentage in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Alcohol Use County		Alcohol Use County	
Seminole	23.4%	Turner	18.0%
Wilkes	19.1%	Miller	18.0%
Pierce	18.3%	Charlton	17.4%
Irwin	18.3%	Pike	16.9%
Treutlen	18.0%	Colquitt	16.8%

Percentage of Students Using Alcohol Within the Past 30 Days (2016)

% alcohol users (2016)

- 2.5 - 5
- 5 - 7
- 7 - 12
- 12 - 15
- 15 - 20
- 20 - 25
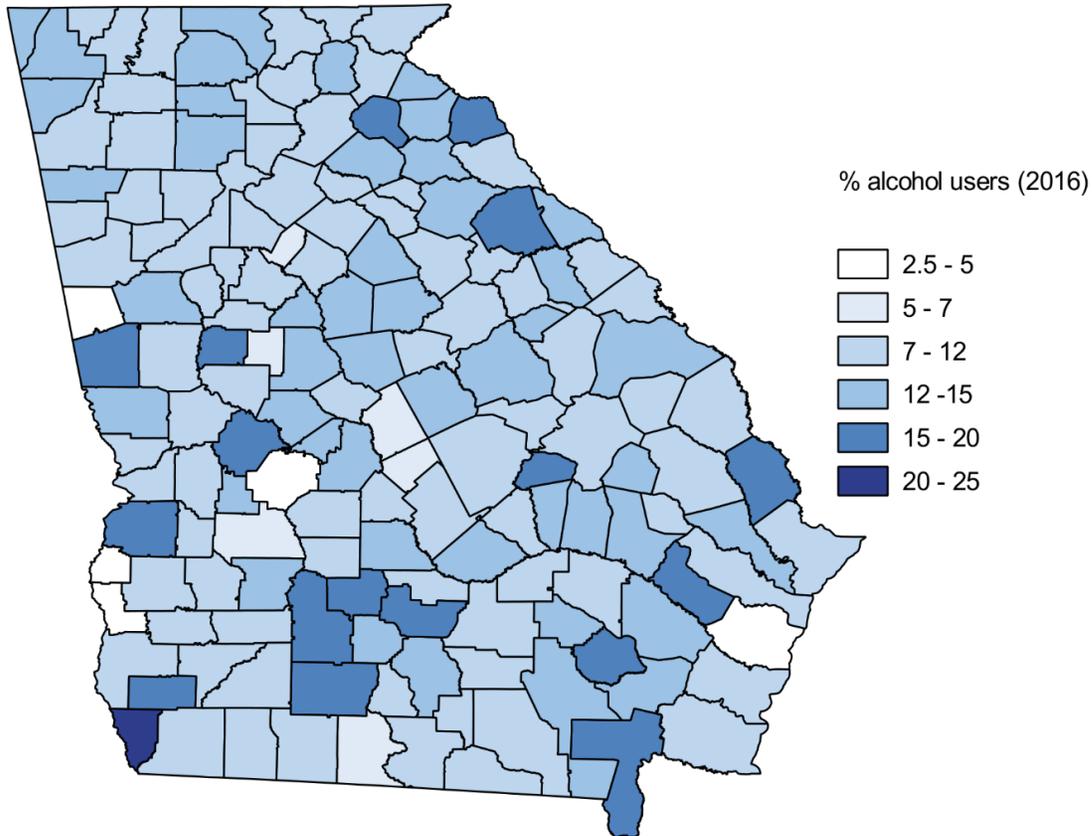
Change data

Reported alcohol use dropped statewide by 10.9 percentage points from 2012 (20.77%) to 2016 (9.87%). This represents a 55.5% decrease over this four-year span. The following map illustrates the change from 2012 to 2016 in percentage of students reporting using alcohol in the past 30 days. Only four counties had increases in percentage of reported alcohol users:

Alcohol Use County	
Dooly	+1.6%
Greene	+1.5%
Baker	+0.6%
Peach	+0.2%

Change in the Percentage of Students Using Alcohol Within the Past 30 Days (2012-2016)
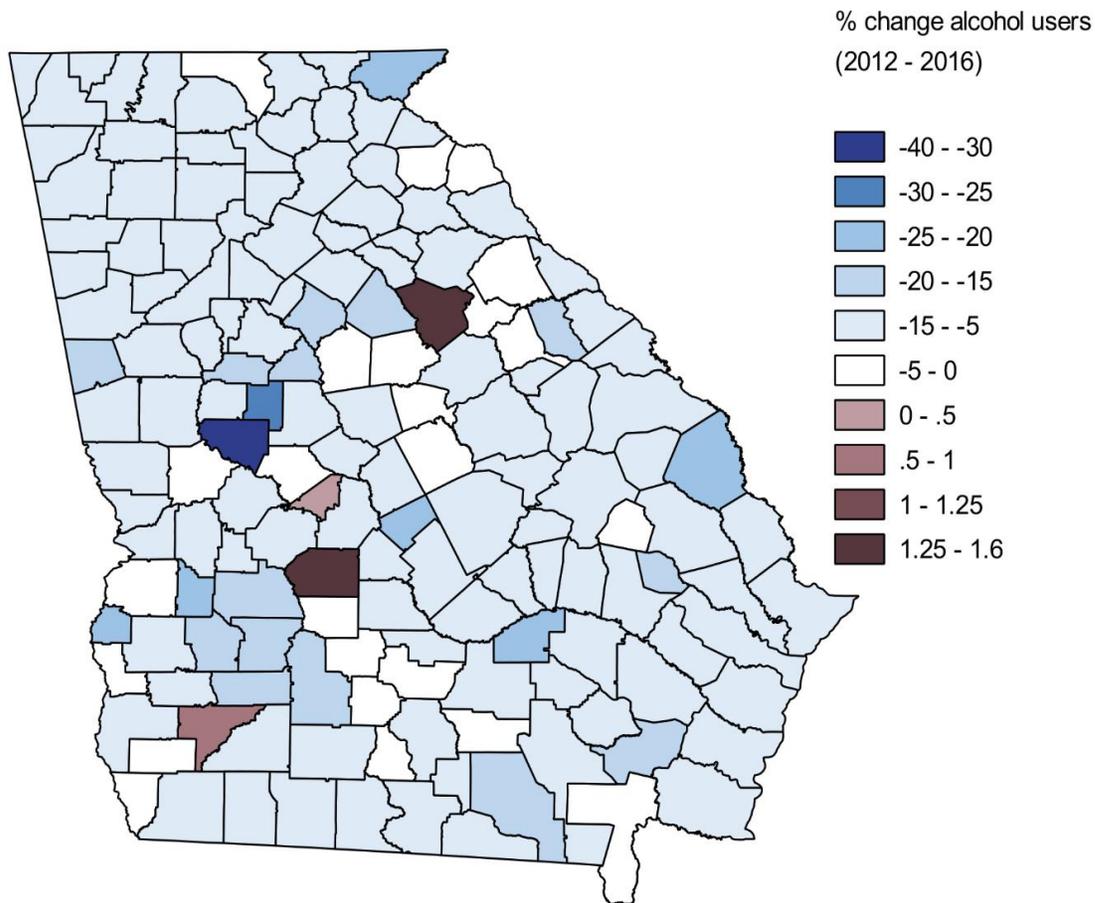
An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

Findings by Race

As mentioned above, few demographic data were available in any of the datasets examined for this study. GSHS data were, however, sorted by race. These data are presented in aggregate statewide.

Most recent data
In 2016 statewide, the most use was reported by White following in descending order by "Other", Hispanic/Latino, Black and Asian/Pacific Islander

	Black	Hispanic/Latino	White	Asian/Pacific Islander	Other
Alcohol %	6.46	9.97	12.9	5.61	11.38

Change data
From 2012 to 2016 statewide, reported use decreased markedly for all races, with the biggest decreases for "Other" and Hispanic/Latino.

	Black	Hispanic/Latino	White	Asian/Pacific Islander	Other
Alcohol %	-10.12	-12.61	-10.3	-10.27	-13.31

Ethanol Poisoning Findings

Most recent data

The rate of reported ethanol poisoning cases in 2016 (per 10,000 persons ages 12-24) was 0.4. (Unlike other poisoning findings reported earlier, the age range for the ethanol poisoning numerator is 12-20. The denominator from the ACS is the same, 12-24.) The rate in each Georgia county is illustrated in the map below. The counties with the highest rates were:

Ethanol Poisoning County	
Pulaski	5.22
Berrien	4.43
McIntosh	3.35
Gwinnett	3.35
Putnam	2.72

Ethanol Poisoning County	
Washington	2.40
Pickens	2.04
White	1.87
Chatham	1.69
Liberty	1.67

Rates of Ethanol Poisoning Cases in 2016 for Those Ages 12 to 20 (per 10,000 Persons Ages 12-24)

Ethanol poisonings per 10k pop. (2016)

- 0 - .5
- .5 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5.5
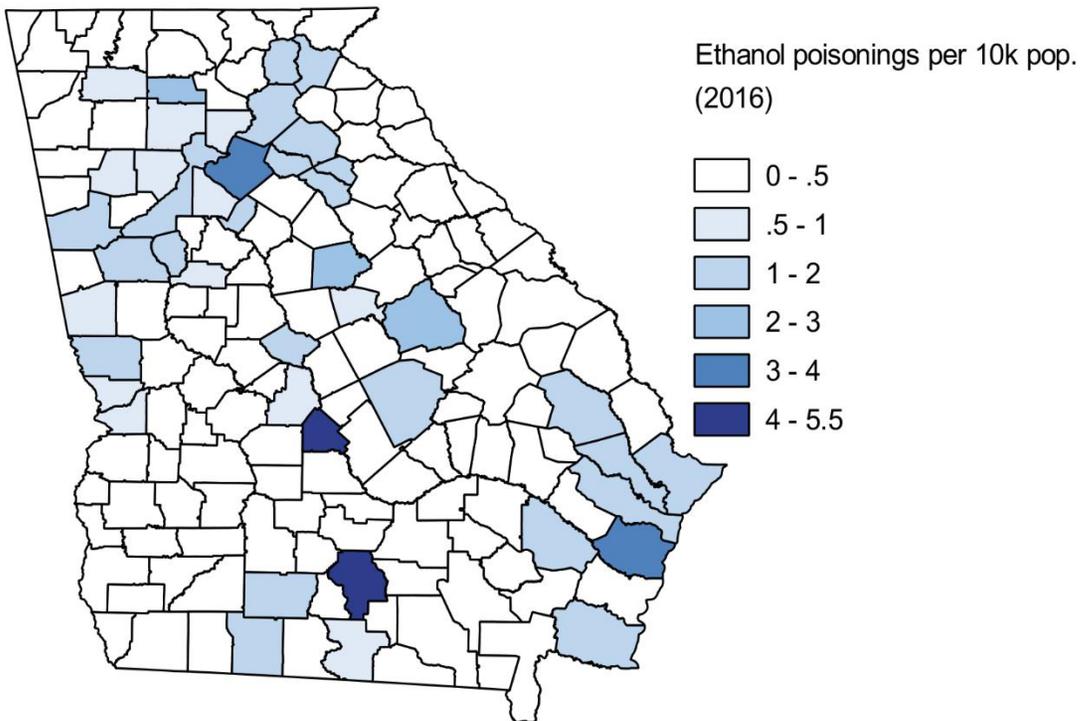
Change data

The statewide change in this rate from 2012 to 2016 was 0.1. The rate change in each Georgia county is illustrated in the map below. The counties with the highest undesirable change were:

Ethanol Poisoning County	
Pulaski	5.22
Berrien	4.43
McIntosh	3.35
Gwinnett	3.35
Putnam	2.72

Ethanol Poisoning County	
Washington	2.40
Pickens	2.04
Liberty	1.67
Rockdale	1.63
Harris	1.56

Change in Rates of Ethanol Poisoning Cases from 2012-2015 for Those Ages 12 to 20 (per 10,000 persons ages 12-24)

Change in ethanol poisonings per 10k pop. (2012 - 2016)
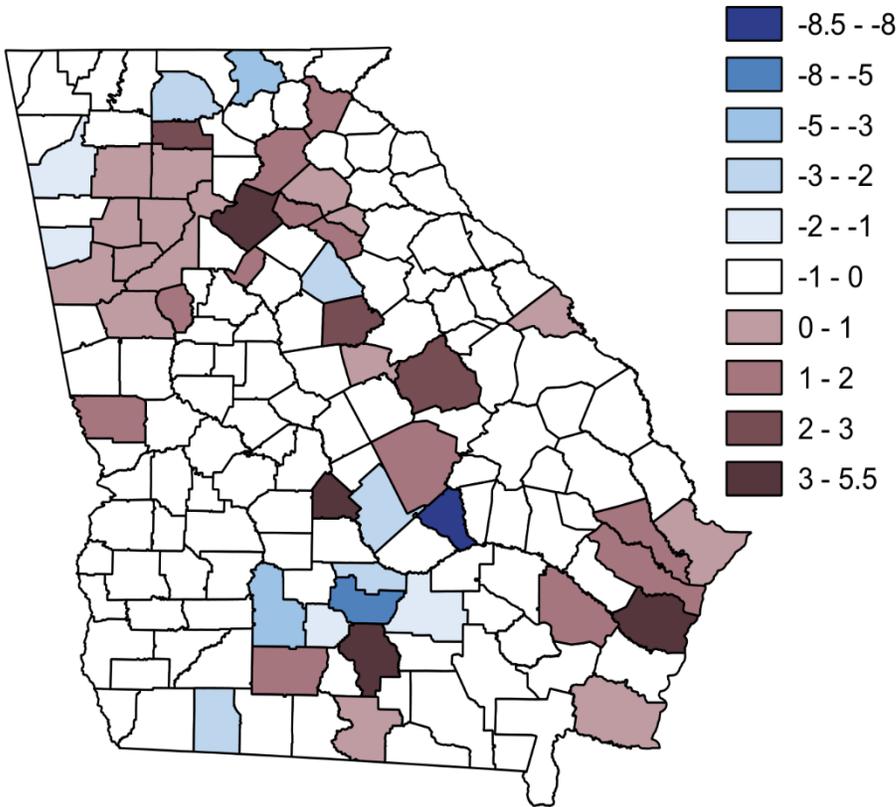
- -8.5 - -8
- -8 - -5
- -5 - -3
- -3 - -2
- -2 - -1
- -1 - 0
- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 5.5

An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

COMPUTERIZED CRIMINAL HISTORY DATABASE

The Computerized Criminal History (CCH) system was searched as a means of identifying criminal offenses related to underage drinking. The CCH serves as the state repository for information regarding finger printable offenses committed in the state of Georgia, and contains arrest, disposition, and custodial data. In Georgia, a person reaches the age of criminal responsibility at the age of 17 years. Therefore, this dataset (with the exception of very serious offenses for which a minor was charged as an adult) contains offense information for persons aged 17 and older.

Data Strengths

The CCH is maintained by Georgia Crime Information Center (GCIC), a division of the Georgia Bureau of Investigation (GBI). Prior to the initiation of the GCIC, information regarding crime and offenders was, for the most part, maintained and housed by local law enforcement agencies, although a relatively small repository of criminal records was maintained by the GBI. Presently the Criminal Justice Information System (CJIS) consists of a series of linked terminals housed in law enforcement facilities throughout the state. These terminals allow access to the CCH data, permitting searches of the data as well as providing access to the FBI's National Crime Information System (NCIS), data on crime and offenders in other states, information on missing persons, and data on stolen property. The CCH contains information on approximately four million offenders, including their criminal histories, dispositions of charges, mugshots, and charge tracking. Significant strengths of the CCH are that it is statewide, has been in use for decades, contains copious records of charges and their dispositions, and has a high level of oversight and data security due to the sensitive nature of the data. The charges are also identified and linked through a fingerprint-based identification system, thus linking records that may and often do have different and more dynamic identifiers such as names and dates of birth. Given that this charge is a misdemeanor, the charge requires direct observation by a law enforcement officer.

Data Limitations

There is a possibility of over-counts represented in the data since charges are made at the time of arrest. For example, underage drinking does not depend on any level of intoxication, only possession of alcohol. It could be that some of those arrested did not have identification and may have in fact produced identification subsequent to their date of arrest which reveals that, at the time of arrest, they were, in fact, of age. Further, there were no relevant demographic data available.

Overview of Findings

Since one can legally purchase, possess, and consume alcohol upon attaining the age of 21, the CCH arrest data relevant to this study is comprised of offense data for individuals aged 17 through 20 years. All instances of these charges inclusive of the years 2014 through 2016 were included in the analyses.

For purposes of this study the following offenses related to underage consumption of alcohol were included (number of charges appears in parentheses):
- Sell Alcoholic Beverages to Minors (0),
- Furnishing, Purchasing, and Possession of Alcoholic Beverages by Persons Below Legal Age (10,573),
- Minor in Possession of Alcoholic Beverage (0),
- Operating Vessel Under Influence of Alcohol (Under the Age of 21) – Felony (7),
- Operating Vessel Under Influence of Alcohol (Under the Age of 21) – Misdemeanor (57), and
- DUI - Driving Under the Influence of Alcohol Under the Age Of 21 (2,683).

Furnishing, Purchasing, and Possession of Alcoholic Beverages by Persons Below Legal Age Findings

The charges were separated by year and county. Given the large number of counties in Georgia, the only charge that occurred with sufficient frequency for analytic purposes was Furnishing, Purchasing, and Possession of Alcoholic Beverages by Persons Below Legal Age, the official reference for which is as follows:

> O.C.G.A. 3-3-23 (2010): Furnishing to, purchase of, or possession by persons under 21 years of age of alcoholic beverages; use of false identification; improper identification; dispensing, serving, selling, or handling by persons under 21 years of age in the course of employment; seller's actions upon receiving false identification.

While violation of this statute is not restricted to persons under the age of 21 (e.g., adults arrested for furnishing alcohol to minors), the charge by its definition concerns underage receipt and/or consumption of alcohol, and therefore does provide some insight as to the frequency and location of the behavior in question.

The ten counties with the most occurrences of this charge from 2014 through 2016, along with the colleges and/or universities located within each of these counties, are:

Rank	County	N	Percent	Cumulative Percent	Colleges/Universities
1	Cobb	1210	11%	11%	Kennesaw State, Southern Polytechnic, Life College
2	Clarke	1155	10.9%	22%	University of Georgia
3	Bulloch	637	6.0%	28%	Georgia Southern University, Savannah State University
4	Gwinnett	578	5.5%	34%	Georgia Gwinnett College, Gwinnett Technical College
5	Fulton	388	3.7%	38%	Georgia Tech, Georgia State, AUC
6	Lowndes	314	3.0%	40%	Valdosta State University
7	Baldwin	308	2.9%	43%	Georgia State College and University
8	Cherokee	259	2.4%	46%	Reinhardt University
9	Forsyth	230	2.2%	48%	Lanier Tech, UNG Cumming Campus
10	Whitfield	223	2.1%	50%	Dalton State College

Number of Arrests for Furnishing, Purchasing, and Possession of Alcoholic Beverages by Persons Below Legal Age

Total number of arrests for furnishing, purchasing, and possession of alcoholic beverages by persons below legal age (2014 - 2016)

- 0 - 50
- 50 - 100
- 100 - 150
- 150 - 350
- 350 - 800
- 800 - 1250
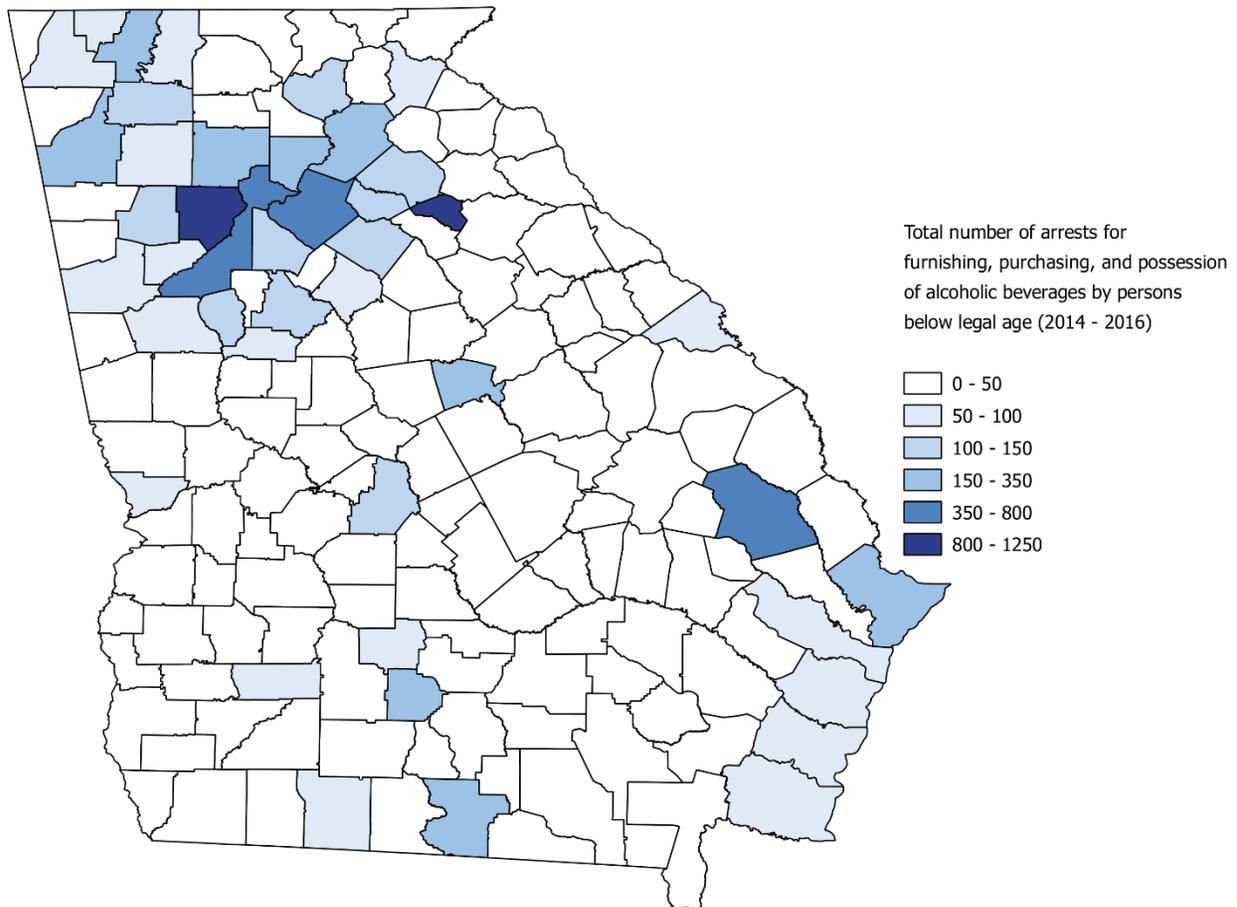
As is clear from the data above, this offense is very closely tied to the presence of one or more colleges/universities in the county. The top ten counties together account for fully half of all incidents of this charge over the 2014 through 2016 period. Furthermore, those charged are predominantly White males and, given the nature of this data source, they are predominantly between 17 and 20 years of age.

When sorting the data by year and according to incidence rate (arrests for this offense per 100,000 persons), the pattern of findings is less clear than the link between the charge and the presence of one or more colleges/universities in the county, as can be seen in the table below:

	Year		
Rank	2014	2015	2016
1	Turner	Bulloch	Clarke
2	Clarke	McIntosh	Bulloch
3	Bulloch	Baldwin	Montgomery
4	Baldwin	Seminole	Seminole
5	McIntosh	Clarke	Atkinson

While Clarke and Bulloch counties appear in the top five counties for each year, McIntosh, Baldwin, and Seminole counties each appear twice while Atkinson and Turner only appear once. Atkinson County's incidence rate ranked 31st and 134th in years 2014 and 2015, while Turner County was ranked 112th and 154th in terms of incidence in years 2015 and 2016. This suggests that Turner County's place at the top of the incidence rankings in 2014 is somewhat of an anomaly. The fact that these two counties also have relatively low populations (around 8,000 each) also contributes to the fluctuation in these numbers, despite attempts to control for overall population by calculating incidence rates per 100,000 residents.

Taken together, the CCH data suggest that Clarke, Bulloch, and Baldwin counties have the highest rate of underage alcohol consumption, not a surprising finding given that these counties each house large universities. In addition to identifying a certain segment of the population known to exhibit high rates of alcohol consumption, it is also likely that targeted enforcement efforts exist in college/university communities as well. It may be that these high rates of arrests for this charge represent at least in part a greater focus on this offense by law enforcement. While Cobb County sits atop the overall frequency rankings, the university population in Cobb does not constitute as large a portion of the overall county population as it does in Clarke, Bulloch, and Baldwin counties.

PDMP PRESCRIBER, DISPENSER AND DELEGATE INTERVIEWS AND FOCUS GROUPS

INTRODUCTION

Interviews, surveys, and one focus group were conducted from March to June 2017 with Georgia PDMP "users," including dispensers (i.e., pharmacists), prescribers (i.e., physicians, dentists, veterinarians, physician assistants, nurse practitioners) and medical/pharmacy technicians, known as "delegates" in terms of PDMP use. The purpose of the interviews, surveys, and focus group was to hear from PDMP users about what works well, what does not work well, what would make the system work better; and to get their opinions about PDMP features from other states not currently included in the Georgia PDMP.

METHODS

In order to identify interview candidates, assessment team members contacted representatives of the Georgia Association of Physician's Assistants, the Georgia Dental Association, the Georgia Nurses Association, the Georgia Pharmacy Association, the Georgia Veterinary Medical Association, the Medical Association of Georgia, the American Medical Technologists of Georgia, and the Society of Professional Optometrists. Structured interviews, approximately one hour in length, with the same set of core questions but slight variations among different user groups, were conducted by phone with 69 PDMP users. Interview scripts for all groups are presented in Appendixes G, H, and I. Findings are reported in these four groupings:

- Thirteen pharmacists and four pharmacy technicians. Two additional pharmacists later participated in a focus group at the June conference of the Georgia Pharmacy Association, for a total of fifteen pharmacists.
- Nineteen physicians and one medical technician.
- Nine "advanced practice registered nurses," referenced as "nurse practitioners," and fourteen physician assistants.
- Three dentists/oral surgeons and four veterinarians.

Candidates who were not able to schedule an interview were invited to complete an on-line survey version of the interview. Fifteen surveys were completed and included in analysis.

Respondent comments from these interviews, surveys, and the pharmacist focus group were recorded narratively. The interviews and survey responses were analyzed using a conventional content analysis approach (Hsieh & Shannon, 2005). This approach was appropriate because it allowed the researchers to describe participants' opinions and experiences.

The authors coded the data as a group. First, two team members read each narrative and derived their own individual codes. They then met to resolve coding discrepancies

and agree on final codes. These codes were then discussed by all six team members, refined and organized into a codebook. Interviewers then used the codebook to re-code their interviews and then compile findings into report sections. Microsoft Excel was used to compile, organize, and analyze the qualitative data.

The section closes with a summary of findings and recommendations across the four PDMP user groups. Illustrative quotes are indented and italicized throughout the report section.

Limitations of the Findings

Given the short timeframe for and limited resources allocated to the assessment process, it was not possible to sample rigorously to ensure thorough representation within each PDMP user group. Efforts were made, however, to ensure that interviewees came from a variety of geographic regions, professional specialties, and practice settings. Details about representativeness are presented in the introduction to each PDMP user group subsection below.

Efforts to contact and interview pharmacy and medical office "delegate" PDMP users were almost entirely unsuccessful. None of the four pharmacy technicians interviewed was a PDMP user, nor was the lone medical technician interviewed, though all five had observed PDMP use and had useful insights. Future investigations should include these important PDMP users.

PHARMACISTS

Description of Those Interviewed

In partnership with the Georgia Pharmacy Association (GPhA), 17 dispensers were interviewed, including 13 pharmacists and four pharmacy technicians. Eleven pharmacists were interviewed by phone during March 2017 and two participated in a focus group at the GPhA Annual Conference on June 15, 2017. Eight pharmacists were female and five were male. They had been in practice from 3 to 42 years with an average of 23 years. They included a pharmacy manager, two pharmacy owners, a director of clinical services, a pharmacist in a quality control position at a medical services company and two academics (one of whom is a certified addiction counselor working with impaired pharmacists). Most worked in retail settings with a few others working at an independent pharmacy, an ambulatory pharmacy associated with a hospital, a Veteran's Administration facility, and a compounding pharmacy. Of the retail settings, three worked in major grocery stores, two at major drug store chains, and two at independent pharmacies. They worked at a mix of rural and urban locations,

including Augusta, Columbus, Dunwoody, Dalton, Macon, Marietta, Griffin, Midland, Athens, and Valdosta.

The four pharmacy technicians included two academics who formerly worked in retail and military settings and currently teach in Pharmacy Technology programs, and two currently working at independent pharmacies. All four were very familiar with the PDMP, had observed its operation, and had insights about PDMP practice; but since none is an authorized PDMP delegate using the PDMP, their comments are included sparingly.

Awareness of the PDMP

All pharmacists interviewed were very aware of the PDMP, and almost all said that technicians almost always enter prescription information into a store's pharmacy system. In only one case was this handled personally by the pharmacist. All pharmacy technicians were also aware of the PDMP and said they enter prescription information into the stores' systems.

Pharmacies vary in the extent to which patient identification is checked consistently.

Sometimes an ID is checked at the time a prescription is dropped off; sometimes it is checked when it is picked up; and sometimes (such as with a well-known customer) it is not checked at all.

Pharmacist responses varied when asked about whether they run PDMP inquiries before dispensing a prescription for a controlled substance. Some do and some don't with variations depending on circumstances. Several described routine "triggers" for running inquiries to the PDMP, including:

- When a patient is new and unknown;
- When any patient, new or known, presents a new opioid (especially Schedule II) prescription;
- When the prescription is from a prescriber or clinic with which the pharmacist is unfamiliar;
- When certain combinations of medications are prescribed;
- At established intervals for existing patients;
- When there is a patient-prescriber pact or contract; and
- The pharmacy software triggers an alert (e.g., a doctor has reported a stolen prescription pad).

Some also described "red flags" that prompt PDMP inquiries, including when:

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- The patient asks to pay in cash and/or says they have no insurance;
- The patient wants to refill the prescription before they are due;
- The patient presents prescriptions from multiple doctors;
- The prescription is from another town or out of state;
- The prescription is from a doctor with a known history of questionable prescribing;
- The prescription is for a pet and the person picking up the order has other "red flags";
- The prescription looks "iffy" or "suspicious" (for example, it is wrinkled or looks like it has been tampered with, such as an obviously added "0" to 30 to render it "300;")
- A patient lets something suspicious slip during conversation; or
- A long-time pharmacist described "'a feeling' based on experience."

A PDMP inquiry can then be used to confirm or disconfirm suspicions and provide additional information, such as if the patient has filled prescriptions at multiple pharmacies or is trying to fill another prescription before an existing one for the same drug has expired. One pharmacist described these red flags this way,

> *When patient is new; if I see their history shows all they ever get is hydrocodone with Tylenol and I see they are also getting other pain meds or if they have not been to see us in 3 months. People would only want to come to us because we have yellow hydrocodone. They are recognized on the street. Different meds have different colors and sell for higher on the street. Some people claim they work better even though it really doesn't matter. White ones are hard to identify.*

When faced with a "problem script," pharmacists and pharmacy technicians described multiple options, including:
- Refusing to fill the prescription;
- Returning the prescription to the patient after writing a note on the prescription;
- Telling the patient they are out of the medication and cannot fill it at the time;
- Counseling the patient more directly with observations like telling them it is too soon to fill the prescription or giving advice like suggesting they use only one pharmacy;
- Consulting another professional, such as another pharmacist or the prescribing physician;
- Writing a note in the patient's record; or
- Informing law enforcement.

One pharmacist said she tells patients about the PDMP, which sometimes surprises them and seems to have the desired effect. Another pharmacist said she called a prescribing doctor to declare that she would not fill a prescription for such a large quantity. Finally, one pharmacist, who always checks the PDMP for narcotics prescriptions, said she has seen people turn around and leave the pharmacy when they see she is working. As one pharmacy technician said,

> *This system is a must. Without the information pharmacies would be flying blind. This is a daily issue. We turn people away daily because of what we see in the PDMP.*

Use of the PDMP, Including Functionality (Access and Navigability)

Pharmacists rated the PDMP as very useful (with an average score of 4.4 on a 5-point rating scale). Their main concern about using the PDMP was disruption of their workflow. Some described having to fill hundreds of prescriptions per day and the unwieldy burden of running so many PDMP inquiries.

Even though they don't personally use the PDMP, pharmacy technicians had concerns about functionality and how cumbersome it is to use. One explained it this way,

> *They [the pharmacists] are already on the computer. But does the PDMP need to be on a secure computer or not on a computer where a prescription has to be filled? If it can be on a separate window… that would be easy. If it has to be on a separate computer that would not work well.*

Both pharmacists and pharmacy technicians stressed the need for system integration between pharmacy software and the PDMP that would update automatically and allow access to virtually real-time data, thereby reducing the workload burden and the potential for data entry error. As one pharmacist said,

> *The lag in time [between the script being written and entered in the PDMP] makes it difficult because patients who are abusing know there is a delay in the system and they use this time to hop from pharmacy to pharmacy before the information appears in the system.*

A pharmacy tech offered a similar observation about linking the pharmacy system and PDMP,

> *It would be neat if the PDMP could be linked to the pharmacy software. So as soon as it is identified that it is a controlled substance there is a hard stop that says before you proceed the data has to be entered in the PDMP.*

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Many pharmacies are already equipped to do this but others are not. It was noted that the cost of system integration might be prohibitive for some smaller, independent pharmacies.

Knowing how to interpret and use PDMP data would also be easier with system integration. As one pharmacist said,

> *Right now, it's very hard to analyze the data [to find] high frequency prescribers, which would be a big help. The medical board has a rule that if a doc prescribed pain meds for more than 90 days, they are supposed to refer for pain management. They are not being compliant with that.*

Pharmacists varied in their understanding of how frequently information should be uploaded into the PDMP. Five reported that dispensing information for their patients is uploaded to the PDMP every day; four said it is loaded weekly and the rest were unsure. One said that information is entered manually into the PDMP each week. A few pharmacists who work at smaller pharmacies worried that requiring more frequent uploading of information would require manual input into the PDMP, which would be a considerable burden. Both pharmacy technicians currently working in pharmacies reported that their stores upload information to the PDMP every day.

For the most part, pharmacists said the PDMP system is fairly easy to access and navigate, and generally works well for them. There were, however, some dissenting voices. One pharmacist said,

> *It is pretty difficult and time consuming. Our equipment and our online access at our store is very antiquated….*

A few found the login process tedious or annoying, including having to remember the website address and login information, having to enter the patient's entire name, and having to agree to PDMP terms at each login. One said that she has to enter confirmatory information on three screens before she can access the screen with the most useful patient prescription information. She suggested that having a "narcotics" button that goes straight to the critical information would be very helpful. Timed logouts requiring repeated logins during the day was also mentioned as an annoyance. Finally, a few mentioned problems with data inaccuracy and duplicate records.

Pharmacists were asked if they typically run inquiries to the PDMP before they dispense. They were split with about half saying yes and half saying no. As previously mentioned, this decision is typically based on a number of "triggers" and "red flags." When inquiries are run, the most useful PDMP features were said to be the data elements related to physician information, insurance status, use of insurance, location of fills, and prescription history information. Being able to use these elements, to see if someone has attempted to get a prescription filled in an out-of-town pharmacy or if they paid cash when they had insurance, are viewed as important and useful. Some mentioned they like being able to make notations about patients in the PDMP. Others viewed PDMP use as helping them to provide continuity of care. As one pharmacist said,

> *Being able to see what docs and what pharmacies are used. You can see if they are hopping around. Seeing the insurance info is helpful. If they claim they don't have insurance and they want to pay cash and the PDMP says they used insurance a week ago, you know they are lying.*

Another observed,

> *You can see information that you would not see otherwise. Pharmacy systems are in a sense operating in silos and we can't see their [other pharmacists] system. So, the only way a pharmacist knew about other prescriptions was if a patient told us or if we had other insurance information. And now the PDMP provides [that] information. Now I am not relying on the patient or insurance company telling me. It has helped in the instances where deception is intended or when they get a prescription filled from someone else that is cheaper and get something from me and the drugs may interact.*

As another pharmacist observed, the PDMP actually doesn't "show" anything; rather, it helps pharmacists use their professional judgement. Several expressed that the PDMP would be more widely accepted if education and marketing were done to help pharmacists, the public, and technicians understand that it is used and interpreted with professional judgment, that it is a tool rather than a weapon. As one explained,

> *Education. If we promote it a bit and not make it look like it is a police state, like we are looking to see if someone is being honest, but promote it as patient indication and patient safety. This can be useful to educate our patients rather than use it to catch our patient doing something negative. Let pharmacists and physicians use their professional judgement to decide if this is an issue that needs to be investigated further.*

An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

There were no PDMP elements considered by pharmacists or pharmacy technicians as not useful, though some pharmacists observed that the PDMP contains data elements they never use. Training and education were cited as important elements to increasing the use and acceptance of the PDMP. Some pharmacists mentioned it would help to have more training about how to access, navigate, and use the PDMP. Pharmacy techs also said they would like training in how to use the PDMP. As one pharmacy tech in an academic setting said,

> *We are in an education setting, we don't have access to the PDMP at all. GDNA will not grant me access to the PDMP. We teach about the PDMP and they [the students] know about the PDMP and they may shadow people using the PDMP. They know that they can be designated [to use the PDMP] by the pharmacist…It would be awesome if we had a dummy PDMP that we could train and teach on.*

Reaction to 2016 Law Changes

[**Editors' note:** All pharmacist interviews were completed before the 2017 changes in PDMP legislation were passed, so, questions about those changes were not included in pharmacist interviews. Prescriber groups, such as physicians, were interviewed later and their responses are included in other sections of this report.]

Interviewees were asked about their general awareness of changes to the PDMP legislated in 2016 and then about their awareness of specific changes, including:
- Allowing licensed staff (delegates), in addition to doctors and pharmacists, to access the PDMP;
- Keeping data for two years instead of one;
- Allowing notification of law enforcement officers;
- Allowing sharing of PDMP data across state lines;
- Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse;
- Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data in order to let Georgia citizens know more about the current epidemic;
- Making registration mandatory for prescribers;
- Making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV, or V drug;
- Requiring the Department of Public Health to randomly test the PDMP "to determine if it is accessible and operational 99.5 percent of the time"; and
- Requiring dispensers to submit prescription information to the PDMP within 24 hours (formerly was 10 days).

All but two pharmacists were generally aware of changes, though they were more aware of some specific changes than others. Similarly, all but one of the pharmacy technicians were aware of the changes made in 2016 and were more aware of some changes than others. Their opinions about specific changes are detailed below. Tables 5 and 6 summarize their opinions.

Almost all were aware that pharmacy technicians, or **delegates**, rather than just pharmacists, **can now use the PDMP**. This change was believed by most pharmacists as an improvement that can help reduce the burden on them, improve their work flow, and increase communication among health professionals. One suggested that pharmacy technicians be able to login with their name and a PIN that could be generated periodically. A few respondents recommended even broader delegation of those designated to use the PDMP.

Others, however, believed that only professionals should have access. A couple said they do not trust delegates to enter information correctly; so. they do it themselves. One said the delegates should face all the same potential consequences (e.g., loss of license) from PDMP misuse as those facing professionals who use it. As another said,

> *My issue is that why would you have a tech do this? They should have their own password so you can find out if they are checking on their friends' use. I have been in stores where a tech was thought to be great. But we found out later they were stealing. I am not trustful. I may talk to them and show them something in the PDMP but I would not want them to have access.*

Pharmacy technicians also had concerns about how many people would be accessing the information and what the access and utilization restrictions would be. Some mentioned the value of training to help them understand how to access and utilize PDMP information while respecting patient privacy. As one respondent said,

> *Trainings for pharmacy technicians may put the pharmacist at ease related to access. There is a professionalism aspect related to access. Opening it up to technicians could be risky. However, the technicians are background checked, HIPAA checked, and registered with the state; so, they are safe to enter the system.*

There were mixed opinions about the usefulness of **keeping data in the PDMP for two years** instead of one. Few pharmacists were aware of this change and most had no opinion about it. Several said that recent data that is far more valuable than two-year-old data. One said,

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This is really not a great benefit because I am making a decision about today, not what happened last week or last month.

A few other pharmacists liked the idea of having information going back to two years in the belief that "more information is better." Similarly, most pharmacy technicians were very supportive of this change and believed it provides an opportunity to look for trends in behavior over time. One mentioned it is consistent with the length of time they keep pharmacy logs. As one stated:

It allows the pharmacist or tech to see trends; if you have more data, you can look for trends in having controlled substances prescribed and/or filled.

Pharmacists were also less aware but when made aware, were supportive of the change **allowing them to contact law enforcement**. One respondent stated,

[Let] pharmacists know about this. It's not effective if we don't know about it.

Another shared that he had recently contacted law enforcement about a concern but could not show them the relevant information in the PDMP due to restrictions about who can view PDMP screens. Another expressed concern about law enforcement having access to this information, saying "law enforcement is sometimes heavy-handed."

Pharmacy technicians were generally supportive of this change. One believed it might benefit patients in the long run by helping law enforcement officers understand circumstances around the use of controlled substances. One stressed that for this to succeed, there should be education for law enforcement about how to interpret, share, and utilize information in a way that respects patient privacy. As one respondent said,

Education to the pharmacies about what information can be released to whom and with what stipulation or requirements. Pharmacies need to be trained on what we need to do, especially with laws changing year to year. I wonder if the drug inspectors know the law.

Pharmacists were very supportive of **interoperability across state lines**. This was especially true of those working in communities along Georgia's borders. Almost all pharmacists believed that this "interoperability" across all states is important. One observed that this change was not working as well as it could because Georgia did not have the resources to implement the change fully. Another observed that she can access PDMPs only in Georgia and South Carolina while she needs access to PDMPs in Alabama, Florida, and Tennessee as well since her patients come from all those states.

Allowing qualified researchers to access de-identified PDMP data was seen widely as an effective change. All but one participant saw this as a positive change. Some pharmacists and techs expressed concern, however, about patient privacy. One was concerned about the lack of clarity around this change; specifically, that effectiveness would depend on what data researchers could access, how data would be de-identified, and how researchers would use the information. A few mentioned the need for qualified researchers who could make use of the data to inform public policy.

Most pharmacists had no opinion about the effectiveness of ***allowing the Georgia Drugs and Narcotics Agency to issue reports of aggregate (de-identified) PDMP data***. There was some concern about how this information could be used but, if used for educational purposes, a few pharmacists thought this might be effective. Pharmacy technicians were divided. Two thought it would be a very beneficial change while the two others thought it might violate privacy or allow the agency to target areas and populations inappropriately.

Potential New Features

Dispensers were asked a series of questions about PDMP features in other states that have not been implemented in Georgia, including:
- Making patient inquiries in the PDMP ***mandatory for prescribers*** before they write a prescription for a Schedule II, III, IV, or V drug; [**Editors' note**: This change was legislated during the 2017 session but had not been passed when pharmacists were interviewed; so, it was posed as a potential change to them.]
- Making patient inquiries in the PDMP ***mandatory for dispensers*** before they fill a prescription for a Schedule II, III, IV, or V drug;
- Adding Naloxone/NARCAN, Evzio use, and other opioid overdose information to the PDMP;
- Adding opioid-related law violations to the PDMP;
- Adding patient/prescriber pact information to the PDMP;
- Adding information about patients who acquire drugs in risky or dangerous ways to the PDMP; and
- Allowing specially certified law enforcement officers to access the PDMP database without a warrant.

Tables 5 and 6 summarize their opinions about these possible changes. Overall, there was mixed support for the additional changes. Details are provided below for each.

Most pharmacists agreed that in theory it is a good idea to ***require running an inquiry in the PDMP for both prescribers and dispensers*** before they write or fill, respectively, a prescription for a Schedule II, III, IV, or V drug. They had significant

practical concerns, however, about disruptions in workflow, the unwieldy burden this might cause, and the ambitious scope of the [then] proposed law implementation schedule. Several pharmacists believed the scope of new legislation was too broad and suggested that mandatory inquiries might be more appropriate for Schedule II drugs only. Limiting this requirement for new prescriptions only was suggested by another.

Seamless integration of the PDMP with pharmacy/medical records and real-time access were seen as vital to effective implementation of this change, while there were doubts that these features are possible at this time. Because of these practical concerns most pharmacists were either not supportive of this change or conditionally supportive only if implementation included specific improvements (e.g., seamless integration, real time access.) One respondent said,

> *I would support this with the caveat that a state-of-the-art system and data was readily and easily retrievable. Of course, everyone would need to comply in order to make it work. It would be great to have this automated. The Georgia system was not well funded.*

Pharmacy technicians reiterated the need for systems integration as a primary concern. A secondary concern of two techs was the perceived devaluing of individual pharmacist judgement and discretion. Another pharmacy tech, however, thought that while it might be time-consuming, it does require that professionals be responsible and knowledgeable about patient circumstances,

> *To make pharmacies have stricter policies on the release and control. If you look it up every time and you see a problem you can't claim ignorance.*

Most pharmacists would support **adding Naloxone/NARCAN and Evzio use information in the PDMP**. Some cautioned that there might be false positives due to vague information about who received the medication from the pharmacy versus who actually took the medication after an overdose. Others expressed privacy concerns or feared people would not get the medications they need legitimately if this information is listed in the PDMP. One expressed concern about having knowledge of past overdoses and its impact on his decisions about filling future prescriptions. Pharmacy technicians were also concerned about the data privacy violations. They had significant concerns about how that information might be used by those accessing the PDMP, including those writing state-level reports from the data.

Despite some concerns about patient privacy, most pharmacists supported the idea of **adding opioid-related law violations to the PDMP**. Those who did support the idea believed it would help them know the patient better and help them make better

decisions about whether or not to fill the prescription, but they cautioned that only drug-related information should be included, not information related to other violations. Pharmacy techs worried about the danger of invading patient rights and how information might be misinterpreted by PDMP users.

Most pharmacists thought the addition of ***patient-prescriber pact information in the PDMP*** would be helpful and would demonstrate a commitment on the part of the patient to a pain management regimen. A few did not believe this information was needed, were concerned about quality and consistency of such data, or were concerned about cluttering the PDMP with less important information. Pharmacy technicians supported this idea but had concerns about how to keep the information up to date given that individuals change their pain management contracts frequently.

Most pharmacists liked the idea of adding information about patients ***who acquire drugs in risky or dangerous ways to the PDMP*** (e.g., other illicit drug use, street purchases of illegally diverted prescription drugs.) A few believed this information could help improve patient care. A typical comment was, "more information is good." One person suggested this be a simple check box on the PDMP. Another said,

> *Sometimes people with an addiction turn from street drugs to opioids because they think they are cleaner, and I don't want to be a part of that.*

Several pharmacists were concerned about patient privacy and the possibility that this feature might jeopardize the chances of those who had made poor choices in the past for getting medications they need. Others had concerns about any new features adding to disruption of workflow. As one pharmacist said,

> *I don't want to stigmatize people that are in a chronic pain situation. I need to do things in a timely manner, and I would not want these things we have been discussing to cause more time. I don't want it [PDMP] to be a witch hunt; needs to be professionals involved. We are doing the right things now and there is no need to go beyond this intention.*

For the most part, pharmacists were not supportive of ***allowing certified law enforcement officers to access the PDMP*** database without a warrant. Only a few were supportive of this change, though even some of them expressed concerns about privacy. Similarly, all pharmacy technicians voiced concern. Even those somewhat supportive believed that oversight and a thorough vetting process would be necessary to ensure law enforcement officers respect personal privacy and are able to interpret the information accurately. As one respondent said,

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It all depends on the vetting policy of that person. I have serious concerns about the abuse of that because they are not clinical and they may not be able to interpret the data.

PHYSICIANS

Description of the Physicians Interviewed

In partnership with the Medical Association of Georgia (MAG), 33 physicians were invited to participate in an interview. Nineteen physicians replied and interviews were conducted in March and April 2017. The remaining 14 were invited to participate in a survey and two responded. This sample represents a range of specialty areas, including emergency medicine, pain management, surgery, and internal medicine. They work at a mix of rural and urban locations that represent 17 zip codes across Georgia. Six physicians were female and fifteen were male. They had been in practice from 9 to 49 years with an average of 29 years.

Awareness of the PDMP

All the physicians were aware of the PDMP and those in active practice reported that they use it. The specific frequency of use depended on a variety of physician-identified triggers and specialty areas. For example, surgeons who prescribe only post-surgically were less likely than all others to check the PDMP prior to prescribing. The majority of physicians interviewed reported that they frequently prescribe opioids. The six who reported rarely/never prescribing were either no longer in practice or their specialty area, such as gynecology, rarely necessitated opioid prescriptions.

Several common, specific triggers for checking the PDMP were identified, including:
- New patient status,
- Drug type, and
- Medical status (e.g., injury type).

The majority will check the PDMP prior to prescribing an opioid for all new patients in order to verify the patient's self-reported drug use history. A couple also said they will check the PDMP when they are prescribing a new drug for the patient and they want to confirm there are no contraindications with other currently prescribed drugs. A few also reported they will check before prescribing Schedule II drugs but not for Schedules III, IV, or V. If the medical condition or injury type is acute, including post-surgery, most will

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not check the PDMP. However, if the medical condition is chronic and/or if the injury is past 30 days old, most will check the PDMP to verify the patient's self-report of use before prescribing.

For established patients with no "red flags" (see below) many physicians reported they will still conduct checks a few times during the year. One said,

We want to capture accurate information to prevent diversion, abuse, everything.

During periodic reviews, they check for specific "red flags" that would indicate need for follow-up with patient. Common red flags include:
- Multiple prescribing physicians,
- Payment with cash instead of insurance,
- Use of a variety of pharmacies,
- Asking for a refill too early,
- Asking for a drug past a recommended prescription period for an acute condition, and
- Simply acting strangely in the physician's professional judgement and in relation to the physician-patient relationship.

A few reported they might run an inquiry into the PDMP along with a drug screen. A few also reported they conduct regularly scheduled drug screens instead of a PDMP check.

If the review of the PDMP raises concerns of misuse, most physicians stated they would talk with their patient and discuss options. Other common responses were to not prescribe at all or to prescribe a non-opioid option. A few reported they would contact other physicians and/or pharmacists who were identified through the PDMP to discuss the findings and concerns. Other repeated, though not common responses, included noting the concern in the patient's medical record and creating an "action plan" that would act like a "patient-prescriber contract." One reported discharging the patient from care, and another reported contacting law enforcement.

Use of the PDMP, Including Functionality (Access and Navigability)

Opinions varied (see Tables 5 and 6) regarding the ease of use, including access and navigation within the PDMP. Most agreed that simply getting into the system is fairly easy, except for the need for a password and the required frequent password changes. Navigating within the system, including searches for specific patients, was more problematic. As one physician said,

> *We need to give them a tool that is easy to navigate so they can remain logged in all day – they should not have to log in and out all day. They don't have time to do that. The website is somewhat laborious; it would be good to have a good website and we would get better outcomes for patients and members. It is not easy at this point and part of the static we are hearing from the provider community – law is going to require us – in some cases a felony or misdemeanor charge if you don't use the tool in the proper manner – almost like a narcotic – it can be a good tool or can be a bad situation if not used correctly.*

As another said,

> *The problem is not so much use – but how you can use the information. You can print it, but you can't put it into a medical record. You cannot even scan and put it into the medical record – if you are using it to make a decision about a person's medication, but you can't document it in their medical records, where do you put it?*

The two most-frequently mentioned issues with the PDMP functionality were the need to link it to the electronic health record and to increase the speed with which a physician or their delegate can search within the system. Physicians mentioned several factors that slowed the search function, including:

- Too many initial variables required,
- The need for a full and correct patient name, and
- Slow system connection.

Many physicians mentioned concerns regarding the need for a full and correct patient name. It was noted that patients may use various names with different doctors or different pharmacies. In order to find all the information about just one patient in these situations, a physician would have to run searches with several variations of a name to find the complete patient drug history. One said,

> *We see 60-90 patients a day with 2 physicians. Think about how much time that would add to a working day, with 2-3 minutes for each patient prescription.*

Other common concerns were focused on PDMP content, namely the timeliness and veracity of data. Most physicians raised concerns regarding the extended lag time between prescription dispensation and that information being entered and becoming available in the PDMP. Several also noted the need for interoperability with all contiguous states and a few mentioned the need for sharing across all 50 states. Many

physicians noted errors in the data, including incorrect prescriber information. One also noted incorrect morphine equivalents.

Despite these concerns, there was nearly unanimous agreement (see Tables 5 and 6) that the information in the PDMP is useful. One said,

> *The medication, quantity, fill date, morphine equivalent dose, prescribing source, pharmacy – all are helpful. Helps us create a profile of the patient to help us see if they are doing everything right or if something else is going on.*

Most said all the information was useful, with the most useful being the prescriber, pharmacy, type of drug, number of pills, number of refills, and all dates. A few mentioned that the payment type and out-of-state prescription data were least useful, unlike the dispensers who found this information very useful (see the pharmacist section of this report starting on page 72.)

Reaction to Recent Law Changes, 2016 and 2017

Interviewees were asked about their general awareness of changes to the PDMP legislated in 2016 and 2017, and then about their awareness of specific changes, including:

- Allowing licensed staff (delegates), in addition to doctors and pharmacists, to access the PDMP;
- Keeping data for two years instead of one;
- Allowing notification of law enforcement officers;
- Allowing sharing of PDMP data across state lines;
- Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse;
- Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data in order to let Georgia citizens know more about the current epidemic;
- Making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV, or V drug;
- Requiring the Department of Public Health to test the PDMP randomly "to determine if it is accessible and operational 99.5 percent of the time"; and
- Requiring dispensers to submit prescription information to the PDMP within 24 hours (formerly was 10 days).

The majority of physicians reported a vague awareness that changes had been made, though few were aware of details. Their opinions about each specific change are detailed below. Tables 5 and 6 summarize their opinions.

There was relatively high support, with some disagreement by a few, regarding the usefulness of **allowing delegation to licensed staff**. Many physicians noted how long it takes to check the PDMP and noted that having delegates is a significant time saver that allows them to provide better patient care. Another common response was that delegation led to better team work in the office, though it would be enhanced if the PDMP was linked with the electronic medical record. A couple also mentioned requiring that it be a licensed person placed a further unnecessary restriction on the system use since it could be handled by unlicensed, clerical staff. In contrast, two mentioned the possibility of abuse of information if accessed by staff other than licensed professionals.

There was mixed support regarding the usefulness of **keeping data in the system for 2 years**. Most physicians agreed that a longer view of patient care could be beneficial to patient care. One said,

> *A year is not a long time in the scheme of patient treatment. I have many patients that have been around for several years.*

Although most stated this was a useful change, some noted that the longer time period would be minimally useful since abuse can usually be spotted very quickly, well within a year.

There was little support for **allowing notification of law enforcement officers**. The most common response was that this should be allowed only situationally, such as when a forged prescription is spotted. Several physicians were concerned with the criminalization of addiction and potential for patient harm. One said,

> *We're treating them as patients. There is a move to treat addiction as a disease and not a crime. If police can help with that then good, but I don't think they do.*

One also mentioned concern with law enforcement becoming involved in tracking physician behavior. He said,

> *Docs are still accountable to a medical board so don't need police enforcing too.*

There was high, uniform support regarding the usefulness of **interoperability across state lines**. The vast majority of physicians supported the use of expanding the PDMP

use across state lines. Most mentioned the critical need for this with all contiguous states and many mentioned the usefulness of expanding use to all 50 states. One physician who works in a nationwide health care system provided this example,

> *One of our patients filled a prescription here and flew to CA the same day and filled it again using an alias - and they checked the CA PDMP and found it, but CA called us and we caught it.*

A few also stressed that due to the mobility of individuals in the U.S., the usefulness of this feature is linked to keeping PDMP data for at least two years. One said,

> *We need to have the data for 2 years in the PDMP – you could just keep moving and avoid detection without this.*

There was also much support, with a few dissenters, regarding the usefulness of **allowing researchers to access PDMP data**. Three physicians felt additional research was *"useless,"* while most believed research is important to help identify solutions and confront the social issue of addiction. One said,

> *We need more research, we have no idea what is happening. The issue is not prescribing per se from the doctor. The issue is what it leads to. The doctor prescribing may be a gateway, but it is the other people affected, kids of the parent, or kids next door, others who get access to the drug. They are the ones that are really affected in this issue.*

Several also mentioned the need for judicious access and attention to patient and physician privacy. A couple also mentioned the need to identify prescriber *"outliers,"* in efforts to understand changes over time, and the geographical distribution of use and misuse. One also recommended that doctors be allowed access to aggregate PDMP data so they can do their own research, such as to track their own rate in relation to other prescribers.

There was little support by most for **making inquiries in PDMP mandatory for prescribers**, though this change was supported by a few. The majority of physicians felt that a mandatory requirement creates a time burden and systemic barrier to efficient work flow that would negatively affect patient care. Several also mentioned that inquiries should be situational and regulations should not apply to all specialists or all patients. One said,

Not every case needs to be checked. Like major back surgery, prescribing a specific amount for a general period of time that should be determined fairly easily – it does not make sense to check before that prescription. I do think that for most in-office practice it should be mandatory.

There was some concern with system-use requirements infringing on practice. Prescribing is viewed as a professional, medical decision and should not be hampered by the PDMP system. One explained,

If they have to check for everyone, then they will stop writing narcotics and that is not the answer. There are patients that need the narcotic.

There was very much, uniform support for **requiring DPH to randomly check the PDMP**. The common opinion was that the system should be 100% functional, *"because if we have to use it, it has to be working."* Several also mentioned that with the new requirements regarding PDMP use, more physicians will be accessing the system and more users will lead to a more burdened system. The overall functionality of the PDMP was considered paramount if the system is really to help prevent prescription drug abuse and misuse.

There was also a high level of uniform support for **requiring dispensers to enter information into the PDMP within 24 hours**. The most common response was that timeliness of these data is critical to patient care. One said,

It's a step in the right direction. I wish it was even shorter because if somebody's trying to doctor shop they're going to go to as many places as possible in as short a period of time as possible.

Many felt the entry of dispensing information should be automated or integrated with electronic health records and therefore would be recorded in real-time. The importance of the role of dispensers is reflected in one response,

The dispensers should be the ones who are mandatory to check the database and they should be notifying the prescribers if they see a problem; they are not in front of the patient. They usually have several people who are there helping and they can take up to 24 hours to fill – whereas a doctor has only 20 minutes to deal with the patients.

Physicians were asked a series of questions about PDMP features in other states that have not been implemented in Georgia, including:

- Making patient inquiries in the PDMP mandatory for **dispensers** before they fill a prescription for a Schedule II, III, IV, or V drug;
- Adding Naloxone/NARCAN, Evzio use, and other opioid overdose information to the PDMP;
- Adding opioid-related law violations to the PDMP;
- Adding patient/prescriber pact information to the PDMP;
- Adding information about patients who acquire drugs in risky or dangerous ways to the PDMP; and
- Allowing specially certified law enforcement officers to access the PDMP database without a warrant.

Overall, physicians were not supportive of additional changes to the PDMP that focused on behavioral information. Details are provided below for each item. Tables 5 and 6 summarize their opinions.

There was wide support, though with disagreement from a few physicians, for *requiring dispensers to run an inquiry before dispensing*. Dispensers were widely viewed as a critical part of the system but opinions differed regarding how much decision-making authority they should be allowed. As one physician said,

> *It almost makes the dispenser like treating the patient. What are they going to do with that information? It's just giving them a hot potato. They are not authorized to do anything with that information. That is opening a bag of worms.*

In contrast, several physicians noted that dispensers should play a leading role. As one respondent said,

> *Dispensers are the ultimate solution. From a strictly public safety standpoint, this is the key. Not the prescribers.*

Many also noted the policy would need to include strict guidance regarding precisely when inquiries are required and when exceptions are allowed.

There was very mixed support for *adding Naloxone and other opioid overdose information to the PDMP*. For example, some individual interviewees had mixed opinions about whether *"more information is good"* versus the questionable usefulness

of this information. Many physicians mentioned it could be misinterpreted and could inhibit patient care by denying a patient needed drug treatment. As one respondent said,

> *I would worry – that just because they had utilized Naloxone, I would not want to automatically assume the person, at this point in time, was drug seeking. So, the downside is it could color, prejudicially, the way a doctor judges the present situation.*

There was mixed support for ***adding opioid-related law violation information to the PDMP***. The inclusion of law-related information concerned a number of physicians. A common concern was that the PMDP is a *"medical, not behavioral database"* and should not be used to document law violations. As one physician said,

> *It puts a law enforcement perspective into patient care and that is uncomfortable for me as a physician. I would like to divorce law enforcement from opioid addiction – we need to treat this as a disease. Physicians should not be in the role of law enforcement.*

A couple of physicians did mention, however, that it might help provide more patient history, though they also voiced concerns about data inaccuracy and patient privacy. As one respondent said,

> *It paints a fuller picture – but I would have concerns about how it would get entered and make the system even more difficult to deal with than it already is.*

There was little support for ***adding patient/prescriber pact information to the PDMP***. Several physicians did note the potential usefulness of this information, but the most common response was that this would add unnecessary information to the PDMP. Most believed it would require additional staff time and might create a burden on the system for very little gain in useful information. As one respondent said,

> *If patients move from doctor to doctor, the system would have to keep up with the changes, the change in pacts. Maybe the narcotic was discontinued because they violated the agreement or maybe just because they changed doctors. There are a lot of nuances to work out for this.*

There was little support for ***adding information about patients who acquire drugs in risky or dangerous ways to the PDMP***. A few physicians did note the potential usefulness of this information, but the most common response was that this would

clutter the system with too much behavioral information. Most were also concerned about patient privacy, the accuracy of this information, and the potential for misinterpretation. Several physicians mentioned specific risk factors for drug misuse and cautioned that adding these data is counter to the real usefulness of the PDMP. As one respondent said,

> *There are many psychosocial disorders, behavioral disorders, childhood disorders, eating disorders - much that could be useful - but should it be added to the PDMP? No. That belongs in the doctor's office, not in the drug database.*

There was very little support for **allowing law enforcement officers to access the PDMP without a warrant**. The majority of physicians had concerns about mixing medical and legal issues. As one respondent said,

> *If it becomes a law enforcement tool, no doctor is going to want to deal with it. It becomes "am I going to get in trouble and end up in court" instead of a tool of treatment.*

Many opposed this idea because it would violate patient privacy and not be HIPAA compliant, could hinder patient care and physician-patient relationships, and open the door to misuse of information by police.

NURSE PRACTITIONERS AND PHYSICIAN ASSISTANTS

Description of the Medical Professionals Interviewed

Nine advanced practice registered nurses (APRNs, sometime called "nurse practitioners" or "NPs") and 14 physician assistants (PAs) were interviewed. There were seven female APRNs and two males. Of the PAs, seven were male and seven were female. Interviewees had an average of 17 years of experience with a range of 2 to 40 years. They worked in a mix of rural, urban, and suburban locations including Waycross, Atlanta, Jasper, Zebulon, Marietta, Rochelle, Covington, Watkinsville, and Hampton. They worked primarily in hospitals, nursing homes, and private clinics. One worked in academia, one worked in a federal prison, and one in a federally qualified health clinic. Among those working in hospitals, most worked in emergency rooms while one worked in a neurology clinic, another in a heart institute, and another in a surgical transplant ICU. Of those in private clinics, most worked in family practices, though a few worked in orthopedics, dermatology, and urgent care.

Four APRNs with whom an interview could not be scheduled completed an online survey. Three were female and one was male. They had from 6 to 44 years' experience. Survey respondents worked in west Georgia, south of Columbus, Waycross, and Atlanta. Three worked in emergency room settings and one in a hospital infectious disease program.

[**Editor's note:** For the rest of this section, responses from interviewees and survey respondents are aggregated and all participants are referenced as "respondents"]

<u>Awareness of the PDMP</u>

Most of the PAs and APRNs were familiar with the PDMP. They recognized, however, that many of their counterparts were unaware. They said there are also some who are aware of the PDMP but do not use it. One reason was the belief that the PDMP is only for use when prescribing Schedule II medication, which PAs and APRNs are unable to do in the state of Georgia. An APRN who was very familiar with the PDMP stated:

> *One of the biggest barriers to the PDMP being used is lack of knowledge about it and a lot of providers that don't prescribe Schedule II's think they don't have to look at it. Almost no oncologists think about going on the PDMP, almost no NPs. How do we get that information out there that it isn't just about pain medication? I have educated many people about the system. Even psychiatrists.*

Another reason cited for lack of use was that PAs and APRNs are not considered independent practitioners; so, they must rely on prescribing physicians. As one APRN stated:

> *A lot of APRN's don't prescribe under their own DEA license; so, some nurses have to call things in. So, if you are working with a patient, then you [have to] get your physician to write the script [it is not under your license] ... In this state APRNs cannot write for Schedule II's only III-V. It gets very confusing compared to other states. In Georgia, there is a lot of extra red tape, and this may cause a lack of awareness and underutilization [of the PDMP] among APRNs because they have to work under a physician's license.*

Another said,

> *With nurse practitioners, you should have independent practice [in the state of Georgia]. When you are independent, you are much more likely to utilize tools to*

keep yourself and your patients safe. Independent practice would cause a huge surge in PDMP usage because the buck stops with you.

Half of those who ever used the PDMP said they check it most or all of the time while the rest check it rarely or never. Of those who do use it, most use it to gain a better understanding of their patients' circumstances, confirm suspicious patterns of drug refills, or investigate concerns that arise during an appointment. Most were more likely to check the PDMP for new patients than for patients with whom they had an established relationship. These prescribers typically utilized the PDMP to evaluate how frequently the patient is accessing controlled substances, assess irregularities in prescription patterns (multiple doctors, pharmacies, payment methods), and understand a client's use history. The most common triggers for checking the PDMP included:

- Volume of drugs being utilized or prescribed,
- If a patient is asking for a refill sooner than anticipated, and
- When suspicions arise during a regular appointment.

When concerns of misuse arise, most said they refuse to write a prescription for a controlled substance. Others said they contact the doctor(s) listed in the PDMP to confirm the circumstances or they check with the pharmacists regarding last filled prescription. A few respondents shared the actual PDMP information with the patient to provide an opportunity to discuss the situation. As one respondent said,

Most of the time I would turn the screen around so the patient could see it and confront them on what I found. I would tell them about the PDMP and ask them about the different pharmacies and prescribers. "This is what I see, please help me understand.

Several perceived gaps in the PDMP system were identified. A few suggested the PDMP include data on controlled substances administered to patients while in the hospital. As one emergency room APRN observed, many patients are hospital shopping and if they cannot get a script to take home, they will ask for a shot or pill before they leave. He described,

What people are doing now they are timing their visits and rotating hospitals. [It would be more effective] if the hospital pharmacists can upload when they administer controlled substances at the hospitals. A lot of the chronic pain people will come in crying and asking for a shot or a pill in the hospital. And we have no idea how many places they have gone to in a day/week/month and done the same thing. Or, when they do sustain an injury, get seen at one

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hospital, get pain medicine, and go to another hospital, over and over again seeking drugs. They will get treated several times for the same injury or issue.

One PA suggested the PDMP be made available to medical staff working in jails and prisons. He said,

It would be useful in the prison system because they don't have any background information and this type of system would let them check and know if the pain medication was a legitimate pain request or if they had concerns or issues with use in the past.

Although the PDMP was perceived widely as a useful tool, a few described the pressure they receive from higher level administration to prescribe pain relief medications. They received this pressure because pain is considered the fifth vital sign in medical standards. Pain became recognized as the fifth vital sign by the Joint Commission (a hospital accreditation organization), in the 1990s, making it equal with blood pressure, heart rate, respiratory rate, and temperature as vital signs. This policy was enacted to encourage practitioners to ask patients about their pain. Clinicians feel pressure to prescribe pain meds to avoid negative comments on client satisfaction surveys, which are linked to a Medicare funding formula that rewards hospitals highly rated by patients and penalizes those that are not. One nursing home APRN explained,

The data agencies gather for the state involves a pain assessment and how well the nursing home manages its patients' pain. One of the questions that nurses have to ask is "Are you currently in pain?" and "In the last 7 days have you experienced pain?" But that pain can be due to anything. The questions are not specific enough. It could be from a headache or a stubbed toe. When that question is answered yes consistently or your percentage of people in pain increases, and your numbers are higher than the state thinks it should be, that is when state surveyors can say you are not controlling a person's pain which can impact the rating of your nursing home, and impact the reimbursement or how much money a nursing home makes…These rating systems impact how much money you earn and your facility's rating. You get pressure from the administration. But pain is so subjective. You can't objectively measure pain like temperature and/or blood pressure, but we are held accountable to how well we manage that pain even if we don't believe a person's pain complaint is valid; just to avoid a complaint.

Another APRN explained the pressure she and her colleagues got from hospital administrators, saying,

> *Practitioners were written up if they did not prescribe medication when a client complained about pain. If a patient reported pain was 8 out of 10 but was simultaneously laughing and talking on the phone and the practitioner didn't offer meds, the practitioner was written up because it was considered inappropriate management of pain. We were told to treat the vital sign.*

Clinicians also know that abusers are aware of the standard and use it to their advantage. One APRN explained,

> *Patients came in and would say their pain was a 10 knowing they we HAD to give them meds. We could be counseled [reprimanded] if not fired for not prescribing pain meds if clients reported having pain at 4 or more out of 10.*

Use of the PDMP, including Functionality (Access and Navigability)

The opinions of PAs and APRNs varied regarding ease of use, including access and navigation within the PDMP. In general, those who used it most frequently thought it was easy to use and navigate. Those who did not use it as frequently described challenges with remembering passwords, logging in, and staying logged in. They expressed frustration with required log-in passwords that change frequently.

According to some, the recent update made the PDMP much easier to navigate and use. Many stressed that integrating the PDMP with electronic health record software would make inquiries much easier, eliminating the need to navigate back and forth between systems.

The amount of time required to check the PDMP was identified as a challenge by some, particularly those working in the emergency room. They explained that the five-to-ten minutes per patient adds to their day significantly. One said,

> *We have people literally dying while we are looking things up on the computer. It is counterproductive to look something up to prescribe 5 Tylenol #3s. I see about 40-50 people per shift and about 35-40 people will come in for pain and 30 will get a small dose of a controlled substance.*

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Most said all the fields in the patient profile were pertinent, specifically prescriber, pharmacy, type of drug, number of pills, number of refills, and dates. A few mentioned that the payment type and out-of-state prescription data were least useful. A few also expressed concerns about the accuracy and timeliness of the dispensing data.

Clinicians suggested the system create an algorithm to automatically alert PDMP users to a patient who has suspicious patterns of activity. As one respondent said,

> *There should be something that automatically flags it [a possible problem prescription] before that person is in the pharmacy to pick up the pills. Give the pharmacist a chance to check with the prescriber to ensure that the script was legitimate.*

Reaction to Recent Law Changes, 2016 and 2017

Respondents were asked about their general awareness of changes to the PDMP legislated in 2016 and 2017, and then about their opinion of specific changes, including:

- Allowing licensed staff (delegates), in addition to doctors and pharmacists, to access the PDMP;
- Keeping data for two years instead of one;
- Allowing notification of law enforcement officers;
- Allowing sharing of PDMP data across state lines;
- Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse;
- Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data to let Georgia citizens know more about the current epidemic;
- Making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV, or V drug;
- Requiring the Department of Public Health to randomly test the PDMP "to determine if it is accessible and operational 99.5 percent of the time"; and
- Requiring dispensers to submit prescription information to the PDMP within 24 hours (formerly was 10 days).

The majority were aware that changes had been made to legislation, but many asked to be reminded of the details. Their opinions about each are detailed below and summarized in Tables 5 and 6.

In general, the APRNs and PAs were aware and supportive of the change ***allowing delegation to licensed staff***. There were several APRNs whose employers were not supportive of maintaining an individual PDMP log-in, and they were encouraged to use the physician's login credentials to check the PDMP. Others lacked clarity on access guidelines; for example, one PA was unsure whether access was for medical professionals only or also included front office staff.

Generally, there was strong support for ***keeping data in the system for two years***. Most clinicians believed that more information was better and these data would help provide a holistic view of the patient and his or her history. There were some, however, particularly those working in emergency care, who believed this was too much information and data was not useful beyond the past year.

There was mixed support for ***allowing notification of law enforcement officers***. Support was situational, such as when a forged prescription is spotted. Several of those both supportive and unsupportive of this change were concerned about patient privacy and whether law enforcement would act more aggressively than the situation warranted, or misinterpret the information.

There was uniform support for ***interoperability across state lines***. All respondents appreciated the importance and value of this change. Some discussed the need for expanding the use to all 50 states. Respondents working near the Georgia border or with transient patients, like truck drivers, felt this type of feature would significantly improve their ability to identify issues and care for their patients.

There was broad support, with few dissenters, regarding the usefulness of ***allowing qualified researchers to access PDMP data***. As one APRN stated:

> *Sometimes these doctors need to break out of the habit. If you have the research and it is presented to someone, this data may have them take a step back [and look] at their practice and re-evaluate what they are doing. It will bring a lot of insight into how practitioners are practicing.*

Of primary concern was the need to maintain patient privacy and ensure that all data would be de-identified and respected. One PA did have concerns about how the data would be interpreted without a full understanding of patient context, stating:

> *How much information would they get – they don't really know what is going on just by looking at the data; they don't get the full story of what happens with people. It doesn't give a complete story.*

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In general, most were supportive of **allowing the Georgia Drugs and Narcotics Agency to issue reports of aggregate (de-identified) PDMP data** to educate the public about the epidemic in the state, hoping it will raise public awareness and lead to legislation directed at addressing the issue. Clinicians also mentioned that increased public awareness could make people more informed consumers of medical services. As one respondent said,

> *It is good for the general population to be aware so then they start to question what they are getting. They just won't ask for oxycodone for a headache."*

A few, however, were concerned about personal privacy and the ability of the public to understand the data provided. One explained,

> *The general public does not have the medical knowledge to interpret the data and if they [GDNA] publish the data, they will not understand it, won't mean anything.*

There was mixed support for **making inquiries in PDMP mandatory for prescribers**. Those supportive believed it would increase the utilization of the PDMP. Those less supportive were concerned that the time requirements for checking every prescription would be too burdensome. Several recommended integrating the PDMP into the electronic health record system to assist with workflow.

Most believed that not every patient or type of controlled substance needs to be checked. It was generally agreed that Schedule IIs should be checked but not others every time. It was suggested that prescribers need the flexibility to use professional judgement. One APRN said,

> *It's insulting. To make it mandatory to participate in a government database is just as bad as making pain the 5th vital sign. This should be offered as a backup for our practice safety. It is a tool and shouldn't be a mandatory obligation. Our certification and license is what dictates our prescribing…It is unnecessary.*

Several wanted those in positions of power to be aware of the fine line medical professionals walk; having to use professional judgement both to follow legal protocols and provide high quality care. As one stated,

> *Sometimes you see people that may have a drug problem and may also have a pain problem. You can have a drug addict and they have big kidney stones; then*

you have a conundrum…I can't send them home with nothing. We are in a precarious position. We have to walk that fine line.

There were also doubts about the likelihood of monitoring and enforcement, as well as concerns about logistical issues related to internet or website availability. One said,

The only problem is if the internet is down at the hospital and I don't want to be penalized for not checking the website.

There was uniform support for **requiring DPH to randomly check the PDMP to ensure accessibility 99.5% of the time**. Clinicians believed it is critically important to the continued use of the PDMP, particularly with mandated inquiries.

There was also strong support among clinicians for **requiring dispensers to enter information into the PDMP within 24 hours**. They explained this rule is necessary for patient care and could be a method to ensure that data in the PDMP is timely and useful for both pharmacists and clinicians. There was concern about the increased workload for pharmacists. One believed the change was too drastic and proposed 72 hours as a more reasonable deadline, thereby providing pharmacists some flexibility in managing the increased workload. Others mentioned that integrating the PDMP system with the pharmacy record system would significantly decrease burden.

Potential New Features

Clinicians were asked a series of questions about PDMP features in other states that have not been implemented in Georgia, including:

- Making patient inquiries in the PDMP mandatory for **dispensers** before they fill a prescription for a Schedule II, III, IV, or V drug;
- Adding Naloxone/NARCAN, Evzio use, and other opioid overdose information to the PDMP;
- Adding opioid-related law violations to the PDMP;
- Adding patient/prescriber pact information to the PDMP;
- Adding information about patients who acquire drugs in risky or dangerous ways to the PDMP; and
- Allowing specially certified law enforcement officers to access the PDMP database without a warrant.

Their opinions on each potential feature are detailed and summarized in Tables 5 and 6. Overall, many of the features raised concerns about overreach and violation of patient privacy.

There was mixed support among clinicians about **requiring dispensers to run an inquiry before dispensing**. Those in support suggested that pharmacists had more time than doctors and were the last line of defense. There was, however, concern about the workload it would add for pharmacists' already busy schedules. There were comments about allowing for professional judgement, particularly when the patient is known.

There was also mixed support for **adding Naloxone and other opioid overdose information to the PDMP**. Some saw the value and believed this information is helpful while others believed it was too much information that could lead to judging patients unfairly and lessen the quality of patient care. As one mentioned,

> *You can have a patient that gets too much narcotic as a mistake and if they get NARCAN, it doesn't mean anything. Or, what if someone slips something in their drink and they have to get NARCAN. You don't know what has happened. People fill EPI Pens all the time, why can't they fill NARCAN.*

There was also mixed support for **adding opioid-related law violation information to the PDMP**. The inclusion of law-related information concerned many clinicians. While those in support pointed out that the additional information could provide a comprehensive picture of the patient's health and wellbeing, there was caution about the type of information included. As one respondent said:

> *It would better equip practitioners and pharmacists to be more cautious. It may also help the pharmacists flag practices/practitioners when you see abnormal amounts of scripts. It [the data] must be based on convictions and not just arrests.*

Some non-supporters suggested adding this information could lead to an invasion of patient privacy and did not add significantly to the information needed to provide high quality patient care. Others raised concerns about how this information would be interpreted, while others wanted to ensure that only medical-related violations be included. There was great concern about the potential for misuse of the data by law enforcement and the importance of keeping the PDMP as a medical tool, not a general database. As one respondent said,

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It is useless information. We do not need to know their criminal history and likewise and police don't need to know people's health information. Next, they are just going to be stopping them on the road doing DUI checks… Let healthcare do their thing and let law enforcement do their thing.

Respondents were generally supportive of ***adding patient/prescriber pact information to the PDMP***. A few raised concerns about patient privacy and whether the "unnecessary" information would clutter the database. Most respondents, however, particularly those in emergency room settings, believed the information would allow the clinician or pharmacist to talk to the patient about being in a contract and ensuring that they only receive their pain medications and controlled substances from their specific pain doctor. As one respondent said,

It gives you an idea that they are in pain management and that their needs are being taken care of. There is a safety and a caring component in it. I don't have to give you anything more and I don't have to feel bad about not prescribing you anything.

There was broad support for ***adding information about patients who acquire drugs in risky or dangerous ways to the PDMP***. Most indicated this information would help them better understand their patients and potential problem areas. There were concerns, however, about patient privacy and use of this information to inhibit patient care. An APRN explained:

How many labels are we putting on people? It would influence me to think a certain way about someone and maybe it was in their past and they were trying to move past it. It would concern me if a provider decided that someone couldn't have medicine especially if that is not the way that person is anymore. When we start to make lots of blanket statements about people, it could lead to us judging people too quickly.

There was very little support for ***allowing law enforcement officers to access the PDMP without a warrant***. Although most believed there may be value, they believed a warrant is necessary to protect patient privacy. Many had significant concerns about how the database would be utilized by officers. Several stressed the importance of ensuring the officers had the support of medical and pharmacological professionals when interpreting and utilizing the information so it was not misused or misinterpreted. There were also significant concerns about ensuring data privacy and security, ensuring patients were not unjustly punished based on this information, and maintaining the PDMP as a medical database rather than as a law enforcement tool.

DENTISTS AND VETERINARIANS

Description of the Providers Interviewed

In partnership with the Georgia Veterinary Medical Association, interviews were conducted with two licensed veterinary doctors and two veterinary medicine workers. Three were female and one was male. The two veterinarians practice in Cleveland and Augusta, for 8 and 14 years, respectively. One is a practice owner and the other works at a large veterinary hospital. The two veterinary medicine workers are based in Atlanta but work with veterinarians around the state.

Through various professional contacts, three interviews were conducted with dentists and oral surgeons. They are in private practice in suburban areas of Metro Atlanta, for 14 to 30 years. Two were female and one was male.

A survey was also sent to dentists and veterinarians for whom an interview could not be scheduled. Three veterinarians and six dentists responded. Five of the dentists worked in general dentistry and one in pediatric dentistry. All are in private practice. They have been licensed from 12 and 30 years. The responding dentists worked in Columbus, Athens, and Macon. The three veterinarians work in private clinics in Athens and Atlanta and have been licensed from 7 to 24 years. All those surveyed were male.

[**Editors' note:** For the rest of this section, interview and survey responses are aggregated and all those interviewed or surveyed are referenced as "respondents."]

Awareness of the PDMP

Veterinarians in Georgia cannot currently access the PDMP. Most, however, prescribe controlled substances and dispense these medications in house. Fourteen states require veterinarians to report controlled substances dispensed within their practice settings and several other states allow veterinarians to run inquiries. As prescribers and dispensers of controlled substances, feedback from those in veterinary medicine is crucial to identifying existing gaps in the PDMP and understanding how the PDMP can be useful to them.

Most respondents were aware of the PDMP. All of the dentists and most of those in veterinary medicine were licensed to prescribe Schedule II, III, IV, and V substances. The four practicing veterinarians prescribe and dispense controlled substances very

frequently. The dentists were also likely to prescribe controlled substances, with some variations in frequency. About half prescribe frequently and half occasionally or rarely.

Most veterinary medicine respondents were familiar with the PDMP, though the two interviewed veterinarians had no knowledge of the PDMP. Although most dentists had heard of the PDMP, about a third had never heard of it, most of whom reported prescribing controlled substances frequently.

Although they knew about the PDMP, most dentists said they do not check the PDMP prior to prescribing. Of the three dentists who do run inquiries, two do so sometimes or rarely and one does so every time since he was notified of the 2017 law change making PDMP inquiries mandatory.
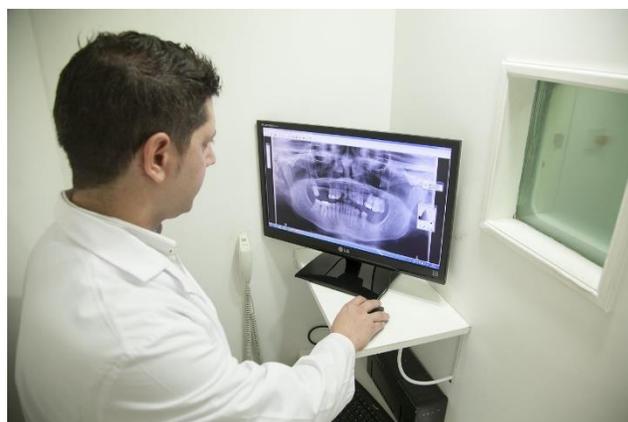
The dentists who said they do check the PDMP usually do so with a new patient or initial controlled substance prescription for a familiar patient. Only one dentist indicated that the PDMP had helped identify problematic prescriptions, in which case he did not write the prescription.

Most respondents who said they do not use the PDMP believed they would use it to identify someone they suspected of prescription drug misuse. Red flags that would prompt an inquiry include:
- The patient requests a prescription without receiving additional treatment [dentist],
- A new patient reports having chronic issues and comes in requesting medications [dentist],
- The patient requests specific combinations of medications [both dentist and veterinarian], and
- The patient (new or existing) is acting suspicious or causing concern [both dentist and veterinarian].

Most respondents described the PDMP as a useful tool, recognizing it affords the ability to gather additional information to serve and protect patients and their families. All dentists who had not used the PDMP and some of the veterinarians indicated they would like to be trained on the PDMP; noting that a combination of online and paper reference materials would be most engaging. Some also believed the training would be most effective if participants are able to interface with the platform during training.

Use of the PDMP, Including Functionality (Access and Navigability)

The three dentists who had used the PDMP agreed that the PDMP is fairly easy to access and navigate (rating it an average of 3.3 on a 5-point scale.) They said the information in the PDMP is useful (average of 3.7 on a 5-point scale), with the most useful variables being the dates prescriptions were filled and quantities of medication patients received. There was one dissenting voice who did not find the PDMP useful,

> *This may be useful to doctors who prescribe chronic pain meds or to weed out dentist shoppers. But in general, for me this is not very useful.*

Respondents from veterinary practice had unique concerns that make them wary of the PDMP. They cautioned that careful consideration be given to the distinctiveness of veterinary medicine. Most did not want to be included as PDMP users, though some said the system could be useful for some veterinarians. One said,

> *We have had scenarios in which we suspect that clients are going from clinic to clinic to get controlled substances. Medical records are not readily shared [among veterinarians] and have to be requested. There have been owners that were requesting refills of controlled substances more frequently than they should have needed them. They were routinely calling a week or two prior to the refill was due. Because of the small-town nature of where we are, we found out that one client had been going to clinic to clinic saying that his dog was in pain and needed meds. He was refilling meds at multiple clinics. Overall, there is not a good way for us to check that.*

While there may be a need for limited use of the PDMP, there are also challenges veterinarians will face if included. For example, on whom is it most appropriate to run inquiries, the pet or the human owner? Many pets have multiple owners and owners have multiple pets. One explained,

> *Because most pets have multiple owners, multiple people are responsible for the animal. If they do not give us complete information about all of the owners and/or if they have multiple animals, the dispensing history may be misleading. It has be to super streamlined and would have to be structured.*

It is possible that one family could also have multiple pets on legitimate controlled substance prescriptions.

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There would need to be a way to make note of this circumstance in the system. As another said,

> If a person has a rescue organization, they will they get flagged. What if the person owns 20 pets? I have one client who has 23 animals and at least half of them are geriatric and need controlled substances.

Another practical concern is that veterinary staff do not routinely check patient identification because they are treating the pet and not the person. Checking patient identification would be an additional burden on staff and an inconvenience to patients.

There is also a concern that mandated patient inquiries (for prescribing) and reporting (for dispensing) in the PDMP system will be burdensome, particularly for small practices. Many veterinarians are single doctor practices that do both prescribing and dispensing in addition to seeing patients and other office duties. Mandatory inquiries and reporting would take time away from the business side of their duties and inflate the cost of veterinary care. One veterinarian said,

> It would be an additional expense for the vet because they would have to get additional staff members to take on additional responsibilities. That could drive up the price of veterinary care in Georgia, and as a small business owner this would be very burdensome and costly. I think the idea is a good idea, but for us it doesn't make sense.

There is also concern about the online nature of the PDMP. Many veterinarians do not routinely use online resources in the same way that human doctors do. Much of their work is lower tech, involving phone and fax rather than online systems. In addition, some veterinarians, particularly those in rural areas, do not have consistent access to high-speed internet. As one respondent said,

> Securing internet access for the 20% or more of veterinarians in the state of Georgia who don't already have it [will be a challenge]. You would also need an additional workstation and all of the IT support that goes with that workstation as well as the personnel. Here in rural Georgia we also don't have the fanciest internet. There are a lot of hospitals that still have dialup or basic DSL or practitioners who are turning their cell phone into a hot spot. This is not high-speed internet. I have hired veterinarians that are not tech savvy. Those basic skills that are taken for granted, in rural northeast Georgia people don't use the web as much.

Reaction to 2016 and 2017 Law Changes

Respondents were asked about their general awareness of changes to the PDMP legislated in 2016 and 2017, and then about their awareness of specific changes, including:

- Allowing licensed staff (delegates), in addition to doctors and pharmacists, to access the PDMP;
- Keeping data for two years instead of one;
- Allowing notification of law enforcement officers;
- Allowing sharing of PDMP data across state lines;
- Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse;
- Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data in order to let Georgia citizens know more about the current epidemic;
- Making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV, or V drug;
- Requiring the Department of Public Health to randomly test the PDMP "to determine if it is accessible and operational 99.5 percent of the time"; and
- Requiring dispensers to submit prescription information to the PDMP within 24 hours (formerly was 10 days.)

Those familiar with the PDMP were generally aware of the changes, though they were more aware of some specific changes than others. Opinions about each are detailed below and summarized in Tables 5 and 6.

Allowing **delegates to access and utilize the PDMP** was seen as beneficial by most because it meant the work could be shared by all staff. Most indicated that staff sizes were generally small and there was a high degree of shared trust and responsibility among staff. Others were more cautious about delegating PDMP use and wanted to be involved in reviewing the data with their staff, rather than relying solely on staff interpretation.

Not many respondents were aware of the change to keep **data for two years instead of one,** but most were supportive when they learned of it. A few believed it was only a little or not at all useful.

Respondents were also less aware of the change allowing them to **contact law enforcement** about suspicions confirmed by PDMP. When made aware of this change, there were mixed opinions. About half were supportive and believed it was very useful

while the other half expressed concerns about mixing law enforcement with health care, particularly as it relates to confidentiality and patient privacy. Even among those who supported this change, caution was raised about patient privacy.

Most in both dentistry and veterinary medicine were supportive of **sharing of PDMP data across state lines**, known as "interoperability." There were a few less supportive, who expressed concerns about data errors from other states and subsequent misinterpretation. As one dentist said,

> *It depends on the situation with the patient. There may be a lot of things you don't know history wise with a particular patient. There could also be errors, there could be two people with the same name in two different states. I agree in some instances it would be a very good thing but there could be a good chance that there is a lot of information that we do not know.*

Allowing qualified researchers to access de-identified PDMP data was seen widely as an effective change. All but one dentist saw this as a positive change. Another dentist, while supportive, expressed concern related to patient privacy. He expressed that as long as data were fully de-identified, very useful research could result. A supportive veterinarian also expressed concern about how the information would be used, stating this would be effective if the data stayed out of the hands of "*big pharma.*"

Most were equally supportive about the effectiveness of **allowing the Georgia Drugs and Narcotics Agency to issue reports of aggregate (de-identified) PDMP data**. They believed it would help raise public awareness of the epidemic. A few respondents believed this would not be helpful, as the data might be exaggerated. As one dentist said,

> *There is so much that citizens don't understand that it would be hard to share information in a way that things were not blown out of proportion.*

There was mixed support for **making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV, or V drug.** While most recognized it would be effective, there was great concern about the additional burden it would place on the prescriber. Some wanted the responsibility placed with the pharmacists. Another dentist recommended the removal of the mandatory component as a way to improve the program.

> *I would not make it mandatory. I understand the thought behind it, but it unnecessarily burdens those of us who already follow the law. Adding another*

law doesn't make the law breakers less likely to break it. It just makes the rest of us jump through more hoops.

Another dentist recommended that it should depend on the quantity of medication prescribed,

> *I think that if we prescribe for less than a three-day supply that we shouldn't need to do this. Our needs for meds are rare, and never exceed twenty pills whenever we do provide this type of medication.*

There was wide, uniform support among those in the dental and veterinary communities for **requiring DPH to randomly check the PDMP to ensure it is accessible and operational 99.5% of the time**.

While generally positive, there was a mix of opinions about the value, usefulness, and feasibility of **requiring dispensers to enter information into the PDMP within 24 hours**. Some suggested that possibly having the timeline shorter than 10 days but longer than 24 hours would be most useful and feasible.

Potential New Features

Respondents were asked a series of questions about PDMP features in other states that have not been implemented in Georgia, including:

- Making patient inquiries in the PDMP mandatory for **dispensers** before they fill a prescription for a Schedule II, III, IV, or V drug;
- Adding Naloxone/NARCAN, Evzio use, and other opioid overdose information to the PDMP;
- Adding opioid-related law violations to the PDMP;
- Adding patient/prescriber pact information to the PDMP;
- Adding information about patients who acquire drugs in risky or dangerous ways to the PDMP; and
- Allowing specially certified law enforcement officers to access the PDMP database without a warrant.

Their opinions about each item are detailed below and summarized in Tables 5 and 6.

Most respondents were supportive of the **mandatory PDMP inquiries for dispensers before they fill a prescription for a Schedule II, III, IV, or V drug**. While they understood the process would be time consuming, respondents believed it would be beneficial. There was more support for mandatory inquiries of Schedule II prescriptions

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and less for Schedules III – V. Respondents recommended integrating the PDMP into other electronic health record systems to streamline the process. Some cautioned that strict legislation may deter providers from treating "high risk" patients. As one dentist said,

> *Frankly I am considering not renewing my DEA license. I will not treat higher risk patients and refer problems to specialists for them to manage.*

While respondents were generally supportive, concerns were raised about patient privacy with the addition of **Naloxone/NARCAN, Evzio use, information in the PDMP**. While some believed it would provide a more comprehensive picture of the patient, others said the information would be redundant and not particularly useful. As one dentist said,

> *I think it is good from a dispensing perspective, but it is not our job to make judgement calls on people; that may not be our business to make. For all we know, they could be using it reasonably. And it puts us in a position of making decisions for them, so we would have to have conversations about the ethics of this.*

Most respondents supported the idea of adding **opioid-related law violations to the PDMP** but there were concerns about ethics and patient privacy. Both supporters and dissenters had concerns about connecting law enforcement to this system and wanted strict controls to ensure that only drug violations be included.

There were also mixed opinions about including **patient-prescriber pact information in the PDMP.** Those who were supportive thought it would add knowledge and understanding about the patient, thereby improving care provision. Those who were less supportive believed the volume of work was not worth the additional knowledge.

Most respondents liked the idea of adding information about patients **who acquire drugs in a risky or dangerous way in the PDMP**. Supporters believed this change could provide more information to improve patient care and help prevent overuse. Those less supportive thought the information would not add to their knowledge and understanding. Again, many supporters and non-supporters voiced concerns about patient privacy and cautioned about how this information would be interpreted and utilized.

Most respondents were not supportive of **allowing certified law enforcement officers to access the PDMP** database without a warrant. Those who were supportive saw it as a tool for law enforcement, while those who opposed it had serious concerns about

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potential abuse by law enforcement. Even moderately supportive respondents were concerned about patient privacy and overreach of law enforcement.

COMPARISON OF FINDINGS ACROSS GROUPS

For most questions about PDMP functionality, recent legislation changes, and potential new features, respondents were asked to rate their approval or support, on a one-to-five scale with one being worst and five being best. Given the volume of issues posed in these interviews, focus groups, and surveys and the variety of opinions among respondents, the following information is presented to summarize, compare, and contrast opinions within and among the groups:

- The extent to which each respondent group (i.e., physicians and delegates, pharmacists and delegates, nurse practitioners and physician assistants, and Dentists and Veterinarians) approved of or supported a current PDMP feature or supported a legislation change or potential new feature;
- The extent to which there was uniform agreement, or "consensus," among respondents within each group. For example, a "low" agreement scenario would be when only some respondents within that group liked the idea, some were lukewarm, and some did not like the idea. A "high" agreement scenario would be when all or most respondents within that group liked the idea; and
- Differences and similarities among the four groups.

Findings

Summary findings about approval or support are presented in Table 5. In general:
- Green-shaded boxes imply high approval or support within the respondent group, with an average group score greater than or equal to <u>4</u>;
- Yellow-shaded boxes imply moderate approval or support within the respondent group, with an average group score between 3.0 – 3.9; and
- Red-shaded boxes imply low approval or support within the respondent group, with an average group score less than 3.0.

Summary findings about agreement are presented in Table 6. In general:
- Green-shaded boxes imply high agreement within the respondent group, with an average group standard deviation of less than 1.0;
- Yellow-shaded boxes imply moderate agreement within the respondent group, with an average group standard deviation between 1.0 – 1.4; and
- Red-shaded boxes imply low agreement within the respondent group, with an average group standard deviation of 1.5 or above.

PDMP features with high approval or support

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Several existing PDMP features had high approval or support across all or most groups, including:

- The effectiveness of PDMP *interoperability* across state lines. There was also consensus within and among the four groups for this feature;
- The effectiveness of *requiring DPH to randomly check PDMP*. There was consensus within and among the four groups for this feature (though the question was not asked of pharmacists because they were interviewed before the legislation was passed);
- The effectiveness of *allowing researchers to access PDMP data*. There was near consensus within and among groups for this feature, with physicians agreeing only moderately among themselves;
- The *usefulness of information in the PDMP*. There was near consensus within and among groups for this feature, with only dentists and veterinarians rating it in the moderate range and only pharmacists agreeing moderately among themselves; and
- The effectiveness of *requiring dispensers to record within 24 hours*. There was near consensus within and among groups for this feature, with only dentists and veterinarians rating it in the moderate range and nurse practitioners and physician assistants, and dentists and vets agreeing moderately among themselves in the moderate range.

PDMP feature with low support

One potential PDMP feature had low support across most groups:

- *Allowing certified law enforcement officers to access the PDMP*. There was near consensus within and among groups for this feature, with only pharmacists rating it in the moderate range and only nurse practitioners and physician assistants agreeing moderately among themselves.

Other patterns among the four groups

Other notable response patterns among the four groups include:

- Physicians, pharmacists, nurse practitioners, and physician assistants all said they sometimes run inquiries into the PDMP; while dentists and veterinarians said they rarely or never do;
- Physicians tended to voice the lowest support for the 17 PDMP features or potential features queried, registering low approval or support for 6 of the 17. At the same time, they voiced high approval or support for 8 of the 17 features, second most among the four groups. Physician support was highest for existing or newly legislated features, with the exception of mandatory inquiries for themselves before prescribing. Support was lowest for other potential features, with the exception of mandatory dispenser inquiries to the PDMP before dispensing;

- Among all groups there was generally moderate or high agreement for existing PDMP features and low agreement for other potential features. This was especially true of physicians, implying a lack of consensus among professionals about these potential features;
- Pharmacists, dentists, and vets typically voiced moderate support for most PDMP features and they tended to approve of or support existing and recently legislated features more than other potential features. Pharmacists were second only to physicians in disagreeing among themselves about PDMP features, though they tended to agree on most features legislated in 2016, as did dentists and vets;
- Nurse practitioners and physician assistants voiced high approval or support for 10 of the features and at least moderate support for all but one of the other features, the highest overall approval or support for the 17 features among the four groups. This implies that for this group, the more information the better. The main item about which there was significant disagreement among members of this group was making inquiries mandatory for prescribers and dispensers. As with other groups, there was most support and agreement for features legislated in 2016; and
- There was low to moderate overall support for adding other potential features to the PDMP. However, physicians were highly supportive of requiring dispensers to run inquiries before dispensing, and nurse practitioners and physician assistants were highly supportive of adding Naloxone use and information about patients who acquire drugs in risky ways to the PDMP.

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Table 5. Ratings of PDMP Features

Question	Physician Ratings	Pharmacist Ratings	Physician Assistant and Nurse Practitioner Ratings	Dentist and Veterinarian Ratings
PDMP usage, functionality and usefulness				
Personally run PDMP inquiries	Sometimes	Sometimes	Sometimes	Rarely or never
Ease of access & navigation	Low	Moderate	High	Moderate
Usefulness of information	High	High	High	Moderate
2016 legislation changes				
Effectiveness of allowing delegation	High	Moderate	High	Moderate
Effectiveness of keeping data 2 years	Moderate	Moderate	High	Moderate
Effectiveness of allowing notification of law enforcement	Low	High	Moderate	Moderate
Effectiveness of interoperability	High	High	High	High
Effectiveness of allowing researchers to access data	High	High	High	High
Effectiveness of reports by GDNA	High	Moderate	Moderate	High
2017 legislation changes				
Effectiveness of making inquiries mandatory for prescribers	Low	Moderate (only proposed in these early interviews)	Moderate	Moderate
Effectiveness of requiring DPH to randomly check PDMP	High	Not asked in these interviews	High	High
Effectiveness of requiring dispensers to record within 24 hours	High	Not asked in these interviews	High	Moderate
Potential new features				
For requiring dispensers to run inquiry before dispensing	High	Moderate	Moderate	Moderate
For adding Naloxone info to PDMP	Moderate	Moderate	High	Moderate
For adding opioid related law violations to PDMP	Moderate	Moderate	Moderate	Moderate
For adding patient/prescriber pact info to PDMP	Low	Moderate	Moderate	Moderate
For adding info about patients who acquire drugs in risky ways to PDMP	Low	Moderate	High	Moderate
For allowing certified law enforcement officers to access the PDMP	Low	Low	Low	Moderate

Table 6. Agreement about Ratings of PDMP Features

Question	Physician Agreement	Pharmacist Agreement	Physician Assistant and Nurse Practitioner Agreement	Dentist and Veterinarian Agreement
PDMP use, functionality and usefulness				
Personally run PDMP inquiries	Sometimes	High	Sometimes	Rarely or never
Ease of access & navigation	Moderate	High	Moderate	High
Usefulness of information	High	Moderate	High	High
2016 legislation changes				
Effectiveness of allowing delegation	Moderate	Low	Moderate	Moderate
Effectiveness of keeping data 2 years	Moderate	Low	High	Moderate
Effectiveness of allowing notification of law enforcement	Low	High	Moderate	Moderate
Effectiveness of interoperability	High	High	High	High
Effectiveness of allowing researchers to access data	Moderate	High	High	High
Effectiveness of reports by GDNA	Moderate	Moderate	Moderate	High
2017 legislation changes				
Effectiveness of making inquiries mandatory for prescribers	Low	Low (only proposed in these early interviews)	Low	Moderate
Effectiveness of requiring DPH to randomly check PDMP	High	Not asked in these interviews	High	High
Effectiveness of requiring dispensers to record within 24 hours	High	Not asked in these interviews	Moderate	Moderate
Potential new features				
Support for requiring dispensers to run inquiry before dispensing	Moderate	Moderate	Low	Moderate
Support for adding Naloxone info to PDMP	Low	Moderate	Moderate	Moderate
Support for adding opioid related law violations to PDMP	Low	Moderate	Moderate	Moderate
Support for adding patient/prescriber pact info to PDMP	Low	Low	Moderate	Low
Support for adding info about patients who acquire drugs in risky ways to PDMP	Low	Moderate	High	Moderate
Support for allowing certified law enforcement officers to access the PDMP	Low	Low	Moderate	Low

RECOMMENDATIONS ACROSS GROUPS

In addition to the "recommendations" implicit in respondents' support for recent legislation and potential new features (summarized above), they also suggested several other PDMP features and related policies to improve PDMP usefulness. They are presented by group below but in one report section so they can be compared and considered together.

Pharmacists

Access and Navigation

- Integrate pharmacy software and the PDMP so dispensing information is updated automatically. This would allow access to essentially real-time data, reducing the workload burden and the potential for data entry error.
- Improve the way patient names are entered into the PDMP. One suggested the name search should be by last name and patient birthdate. Another suggested having the home screen start with the patient name search and last medication prescribed. Another said,

> *[One] of the things that makes the PDMP difficult is that patient names have to be entered completely. There is no legal name requirement so patients can be entered multiple ways; for example, women who get married and have two names or hyphenate; or Hispanic families who have multiple names…. The data in the PDMP is limited to how accurate that data was entered. The doctor may write the script one way and insurance won't pay because the name doesn't match their information. If people had an identifier, a number or something, like a driver's license or some other number, that would help. I think some states have done that. This would help us locate them in the system.*

- Have the ability to conduct a bulk search, automatic searches, or multiple ways to look up patients.
- Have the ability to highlight and search for specific medications.
- Speed up access to critical information by reducing the number of "clicks" required. One suggested having a "narcotics" button that goes straight to the critical information.

Content
- Have an automatic calculator that determines if it is time to fill a prescription.
- Include other medications that are not currently scheduled as a controlled substance, such as Gabapentin, which is used to accentuate narcotic effects.
- Have information about whether patients are being treated for a chronic or acute condition.
- Have the ICD code the physician's office uses for billing.
- List the pharmacy and doctor phone numbers.

Regulations, Resources and Responsibilities
- Limit the quantity of narcotics that prescribers are allowed to prescribe, depending on various conditions and situations.
- Provide more education for PDMP users.
- Have qualified people manage and more resources to support the PDMP, especially for monitoring and enforcement purposes. One pharmacist said,

> *I am concerned about tracking. How will you know if the doctor did it [checked the PDMP]? I have become a police person and that is not what I am here for. When they first started talking about this, the doctors weren't going to be fined but we were.*

- Ensure that responsibility is shared between pharmacists and physicians for using and updating the PDMP. Some pharmacists were doubtful physicians would use the PDMP, even if required, and others noted that doctors are typically slow to respond to pharmacist calls. One complained that he had been asked by a doctor to look things up in the PDMP for him. Despite these issues many were emphatic that such communications are critical to detecting, confirming, and dealing with suspected abuse and misuse. One explained that prior to the PDMP he could not contact doctors to ask questions or discuss perceived problems. As another explained,

> *It's better, definitely better to be able to speak about what we see, especially with ER docs who don't have time to go into the PDMP. It comes down to pharmacists policing drug-seeking patients and telling them [the doctors] what we see. It does help prevent patients from going elsewhere. Now the doctors will sometimes tell the pharmacist to cancel the prescription and send them back to the emergency room, whereas before they may not do that.*

Physicians

Access and Navigation

- Allow for full integration of the PDMP into electronic health records and dispensing databases to simplify inquiry procedures and provide real-time data.
- Simplify name searching and allow for common name variations. Allow batch searches of patient names.
- Reduce the frequency of required password changes.
- Reduce the number of variables required to enter the PDMP.
- Reduce the number of clicks required to move through the system and improve the click flow to increase the speed of navigation.
- Allow users to maintain log-in for longer periods of time.

Content

- Correct the morphine equivalent data.
- Increase information collected to facilitate easier communication with other professionals, both physicians and pharmacists.

Regulations, Resources and Responsibilities

- Expand access to and use of the PDMP to include child protective services, VA hospitals, and ER facilities.
- Increase education and training about PDMP use to improve data accuracy and completeness.
- Maintain PDMP data primarily as a medical database for use in patient care.
- Allow physicians access to aggregate, de-identified PDMP data so they can do their own research, such as to better understand geographical and population patterns of use and misuse over time and help identify possible solutions.
- Ensure patient confidentiality and HIPAA compliance.
- Allocate resources to monitor access and use of PDMP to guard against misuse of information.
- Require physicians to make inquiry in PDMP only with all new non-surgical or acute injury patients and on a periodic basis for all patients, not all patients every time.
- Require dispensers to conduct real-time data entry of all dispensed medications into the PDMP.
- Expand delegates to include non-professional, well-trained clerical staff.

Nurse Practitioners and Physician Assistants

Access and Navigation
- Integrate the PDMP with electronic health record software to make inquiries much easier, eliminating the need to navigate back and forth between systems.

Content
- Include data on controlled substances administered to patients while they are receiving care in the hospital.
- Create algorithms to flag potential abusers.

Regulations, Resources and Responsibilities
- Increase PDMP marketing and education to increase awareness among potential users. Some prescribers are completely unaware and others do not know enough to utilize it proficiently. For example, providing informational webinars, sending PDMP representatives to present at professional conferences, and releasing memos/briefs to state medical organizations. As one respondent said,

> *What could be helpful is educational webinars or tutorials on recognizing potential drug abuse and how to recognize signs of abuse within the PDMP data. An occasional webinar or presentation could be used by hospitals, conferences, or other groups to present current, useful examples of abuse that are specific to our state.*

- Expand access and use to emergency rooms, and jails and prisons.
- Ensure patient confidentiality and HIPAA compliance

Dentists and Veterinarians

Access and Navigation
- Add a mobile application to provide fast and convenient access to the PDMP, because calls for controlled substances often come late at night and on weekends.

Regulations, Resources, and Responsibilities
- Increase education and marketing about the PDMP. For example, link it to professional organizations. As respondent one said,

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It has to be brought to our attention in some way. Some sort of mandatory registration [through the licensing board] would be the best way to make sure that everyone with a DEA number knows about the system.

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APPENDICES

County	Percent Reporting *Painkiller* Use (2016)	County	Percent Reporting *Painkiller* Use (2016)	County	Percent Reporting *Painkiller* Use (2016)
Long	4.80	Evans	2.65	Franklin	2.13
Berrien	4.78	Thomas	2.65	Chatham	2.12
Sumter	4.13	Washington	2.64	Jasper	2.11
Lincoln	3.95	Wilkes	2.64	Peach	2.09
Miller	3.88	Houston	2.62	Seminole	2.08
Burke	3.77	Glynn	2.55	Dougherty	2.05
Colquitt	3.75	Elbert	2.51	Quitman	2.04
Irwin	3.61	Paulding	2.51	Habersham	2.02
Putnam	3.48	Twiggs	2.50	Mitchell	2.02
Effingham	3.46	Hart	2.49	Stewart	2.00
Bryan	3.36	Oconee	2.48	Fayette	1.99
Coweta	3.36	Baker	2.47	Spalding	1.97
Dade	3.36	Clayton	2.47	Towns	1.96
Turner	3.35	Madison	2.46	Jackson	1.94
Upson	3.30	Whitfield	2.42	Mcintosh	1.94
Laurens	3.27	Dekalb	2.40	Tattnall	1.94
Crawford	3.25	Ware	2.40	Clarke	1.93
Pike	3.25	Candler	2.38	Wilcox	1.93
Meriwether	3.11	Monroe	2.38	Bartow	1.88
Columbia	3.08	Mcduffie	2.34	Early	1.88
Taliaferro	3.03	Liberty	2.33	Gordon	1.88
Ben Hill	3.00	Bibb	2.29	Stephens	1.84
Troup	3.00	Marion	2.27	Gwinnett	1.83
Chattooga	2.97	Charlton	2.25	Carroll	1.81
Lumpkin	2.97	Newton	2.24	Coffee	1.80
Richmond	2.97	Baldwin	2.21	Telfair	1.80
Brantley	2.88	Randolph	2.19	Atkinson	1.78
Lee	2.83	Bulloch	2.18	Douglas	1.78
Worth	2.82	Cherokee	2.18	Fulton	1.74
Wayne	2.78	Harris	2.18	Oglethorpe	1.74
Banks	2.77	Henry	2.18	Bacon	1.72
Gilmer	2.75	Barrow	2.17	Jones	1.72
Johnson	2.73	Muscogee	2.17	Greene	1.70
Walker	2.69	Floyd	2.16	Murray	1.66
Butts	2.66	Talbot	2.15	Jenkins	1.65
White	2.66	Toombs	2.14	Schley	1.64

County	Percent Reporting *Painkiller* Use (2016)
Haralson	1.62
Hall	1.61
Pickens	1.61
Cobb	1.59
Screven	1.58
Lowndes	1.57
Treutlen	1.55
Catoosa	1.54
Glascock	1.52
Dodge	1.51
Morgan	1.47
Calhoun	1.46
Jefferson	1.45
Camden	1.42
Rockdale	1.42
Pulaski	1.40
Terrell	1.38
Emanuel	1.36
Walton	1.34
Echols	1.33
Polk	1.33
Appling	1.28
Hancock	1.27
Pierce	1.27
Decatur	1.26
Dooly	1.22
Rabun	1.20
Grady	1.18
Taylor	1.16
Lamar	1.15
Chattahoochee	1.11
Crisp	1.10
Union	1.06
Montgomery	1.05
Tift	1.04
Fannin	1.03

County	Percent Reporting *Painkiller* Use (2016)
Brooks	.98
Webster	.95
Wheeler	.93
Warren	.91
Clinch	.90
Dawson	.88
Forsyth	.87
Lanier	.87
Wilkinson	.67
Heard	.65
Cook	.57
Jeff Davis	.53
Bleckley	.39
Macon	.27
Clay	.00

County	Change in Percentage Reporting *Painkiller* Use (2015-2016)	County	Change in Percentage Reporting *Painkiller* Use (2015-2016)	County	Change in Percentage Reporting *Painkiller* Use (2015-2016)
Long	2.09	Floyd	0.04	Polk	-0.44
Sumter	1.99	Randolph	0.04	Pulaski	-0.44
Berrien	1.97	Glynn	0.02	Gwinnett	-0.45
Twiggs	1.68	Madison	0.02	Fulton	-0.46
Ben Hill	1.59	Paulding	-0.01	Chattooga	-0.46
Johnson	1.34	Whitfield	-0.01	Coweta	-0.46
Wilkes	1.14	Cherokee	-0.01	Pike	-0.47
Lumpkin	1.14	Tattnall	-0.02	Clayton	-0.47
Lincoln	1.07	Union	-0.04	Rockdale	-0.47
Hart	1.02	Bulloch	-0.05	Muscogee	-0.49
Bacon	0.97	Toombs	-0.09	Jones	-0.50
Evans	0.93	Charlton	-0.10	Oglethorpe	-0.52
Greene	0.93	Murray	-0.11	Jeff Davis	-0.55
Atkinson	0.92	Dekalb	-0.13	Douglas	-0.55
Butts	0.86	Irwin	-0.16	Effingham	-0.56
Hancock	0.74	Chatham	-0.17	Catoosa	-0.57
Wayne	0.66	Jenkins	-0.19	Decatur	-0.59
Laurens	0.63	Gilmer	-0.22	Spalding	-0.61
Turner	0.62	Ware	-0.23	Cobb	-0.61
Colquitt	0.57	Peach	-0.24	Elbert	-0.61
Brantley	0.57	Newton	-0.27	Houston	-0.62
Quitman	0.53	Worth	-0.27	Henry	-0.62
Franklin	0.50	Hall	-0.27	Mcintosh	-0.62
Appling	0.41	Bibb	-0.27	Dougherty	-0.65
Putnam	0.37	Columbia	-0.27	Oconee	-0.66
Miller	0.37	Stephens	-0.34	Dodge	-0.67
Upson	0.36	Gordon	-0.34	Harris	-0.69
Telfair	0.32	Haralson	-0.36	Washington	-0.72
Meriwether	0.32	Emanuel	-0.36	Fannin	-0.73
Coffee	0.22	Fayette	-0.38	Wheeler	-0.75
Bryan	0.22	Forsyth	-0.38	Clinch	-0.75
Thomas	0.17	Mitchell	-0.39	Carroll	-0.83
Baker	0.14	Jackson	-0.40	Jefferson	-0.85
Clarke	0.12	Morgan	-0.40	Calhoun	-0.85
Pickens	0.11	Richmond	-0.40	Echols	-0.86
Burke	0.11	Pierce	-0.41	Lowndes	-0.90
Baldwin	0.09	Tift	-0.42	White	-0.94
Habersham	0.08	Banks	-0.42	Wilcox	-0.95

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County	Change in Percentage Reporting *Painkiller* Use (2015-2016)
Walker	-0.98
Lanier	-1.05
Stewart	-1.06
Treutlen	-1.09
Walton	-1.10
Candler	-1.18
Towns	-1.19
Schley	-1.19
Bartow	-1.20
Monroe	-1.22
Seminole	-1.24
Terrell	-1.27
Taylor	-1.34
Cook	-1.36
Dawson	-1.37
Mcduffie	-1.40
Marion	-1.41
Barrow	-1.41
Talbot	-1.42
Lee	-1.42
Rabun	-1.50
Camden	-1.58
Lamar	-1.61
Early	-1.61
Bleckley	-1.63
Troup	-1.65
Jasper	-1.67
Liberty	-1.70
Crawford	-1.78
Crisp	-1.79
Dade	-1.81
Wilkinson	-2.04
Grady	-2.11
Screven	-2.17
Chattahoochee	-2.38
Brooks	-2.44
Dooly	-2.57
Webster	-2.66

County	Change in Percentage Reporting *Painkiller* Use (2015-2016)
Montgomery	-2.77
Warren	-3.21
Macon	-3.32
Glascock	-3.32
Heard	-3.97
Clay	0.00
Taliaferro	0.00

County	Percent Reporting *Tranquilizer* Use (2016)	County	Percent Reporting *Tranquilizer* Use (2016)	County	Percent Reporting *Tranquilizer* Use (2016)
Clay	3.85	Walker	1.75	Hart	1.39
Marion	3.40	Lumpkin	1.73	Tattnall	1.39
Colquitt	3.23	White	1.73	Glynn	1.38
Talbot	3.23	Lamar	1.72	Lee	1.38
Putnam	3.09	Bibb	1.71	Oconee	1.38
Irwin	3.06	Cherokee	1.70	Clarke	1.37
Long	2.95	Ware	1.68	Haralson	1.37
Dade	2.94	Turner	1.67	Johnson	1.37
Troup	2.83	Whitfield	1.66	Catoosa	1.36
Burke	2.68	Ben Hill	1.65	Cobb	1.34
Peach	2.65	Muscogee	1.61	Habersham	1.34
Pike	2.55	Candler	1.59	Fayette	1.31
Coweta	2.46	Evans	1.59	Telfair	1.29
Effingham	2.34	Screven	1.58	Walton	1.29
Oglethorpe	2.32	Brantley	1.57	Decatur	1.26
Meriwether	2.22	Polk	1.57	Early	1.25
Stephens	2.16	Seminole	1.56	Elbert	1.25
Washington	2.14	Upson	1.55	Lowndes	1.25
Houston	2.05	Franklin	1.54	Schley	1.23
Barrow	2.04	Gilmer	1.54	Worth	1.21
Bryan	2.02	Laurens	1.53	Newton	1.20
Spalding	2.02	Pierce	1.50	Chattooga	1.19
Richmond	1.99	Berrien	1.49	Crawford	1.18
Henry	1.94	Chatham	1.49	Towns	1.18
Harris	1.93	Bacon	1.47	Douglas	1.15
Butts	1.92	Greene	1.46	Dougherty	1.12
Madison	1.91	Randolph	1.46	Pulaski	1.12
Twiggs	1.88	Carroll	1.43	Hall	1.11
Clayton	1.83	Fulton	1.43	Pickens	1.11
Dekalb	1.83	Thomas	1.43	Dodge	1.10
Mcduffie	1.82	Bartow	1.42	Tift	1.10
Warren	1.82	Floyd	1.41	Banks	1.09
Monroe	1.78	Jasper	1.41	Jackson	1.09
Wayne	1.78	Charlton	1.40	Murray	1.08
Columbia	1.77	Wheeler	1.40	Baldwin	1.06
Paulding	1.75	Gwinnett	1.39	Jones	1.03

County	Percent Reporting *Tranquilizer* Use (2016)	County	Percent Reporting *Tranquilizer* Use (2016)
Dawson	1.00	Forsyth	.57
Liberty	1.00	Dooly	.41
Stewart	1.00	Morgan	.40
Lincoln	.99	Rabun	.40
Brooks	.98	Chattahoochee	.37
Mcintosh	.97	Terrell	.35
Miller	.97	Jeff Davis	.27
Mitchell	.95	Macon	.27
Rockdale	.93	Baker	.00
Union	.91	Hancock	.00
Clinch	.90	Montgomery	.00
Jefferson	.90	Quitman	.00
Calhoun	.88	Taliaferro	.00
Wilkes	.88	Treutlen	.00
Grady	.86	Webster	.00
Bulloch	.85		
Camden	.85		
Sumter	.83		
Jenkins	.82		
Taylor	.78		
Appling	.77		
Fannin	.77		
Wilcox	.77		
Coffee	.76		
Glascock	.76		
Cook	.71		
Gordon	.71		
Emanuel	.68		
Echols	.67		
Wilkinson	.67		
Heard	.65		
Crisp	.61		
Atkinson	.59		
Bleckley	.58		
Lanier	.58		
Toombs	.58		

County	Change in Percentage Reporting *Tranquilizer* Use (2015-016)	County	Change in Percentage Reporting *Tranquilizer* Use (2015-016)	County	Change in Percentage Reporting *Tranquilizer* Use (2015-016)
Long	2.27	Ware	0.29	Haralson	0.01
Peach	1.83	Wilkes	0.28	Screven	0.00
Marion	1.70	Wheeler	0.28	Fayette	0.00
Burke	1.46	Pierce	0.27	Spalding	0.00
Evans	1.30	Franklin	0.26	Murray	-0.02
Putnam	1.26	Banks	0.21	Grady	-0.02
Greene	1.20	Clayton	0.21	Stewart	-0.02
Stephens	1.18	Emanuel	0.19	Walton	-0.02
Irwin	1.17	Mitchell	0.18	Cook	-0.03
Meriwether	1.10	Henry	0.18	Oconee	-0.03
Randolph	1.10	Worth	0.18	Miller	-0.03
Twiggs	1.06	Carroll	0.18	Fannin	-0.04
Wayne	1.04	Richmond	0.16	Tift	-0.05
White	1.04	Polk	0.16	Glascock	-0.05
Colquitt	0.95	Glynn	0.15	Mcduffie	-0.05
Johnson	0.90	Whitfield	0.15	Harris	-0.06
Butts	0.85	Appling	0.14	Effingham	-0.08
Candler	0.77	Clarke	0.13	Floyd	-0.08
Telfair	0.70	Union	0.12	Muscogee	-0.08
Jefferson	0.67	Tattnall	0.12	Clinch	-0.09
Brantley	0.67	Mcintosh	0.12	Hall	-0.11
Berrien	0.67	Thomas	0.11	Rockdale	-0.11
Baldwin	0.60	Sumter	0.11	Bibb	-0.12
Decatur	0.52	Crisp	0.11	Oglethorpe	-0.13
Hart	0.50	Charlton	0.10	Toombs	-0.14
Bacon	0.48	Catoosa	0.10	Jeff Davis	-0.14
Washington	0.46	Dekalb	0.10	Brooks	-0.16
Pike	0.43	Jenkins	0.09	Schley	-0.19
Bryan	0.41	Ben Hill	0.08	Jackson	-0.21
Gilmer	0.40	Upson	0.08	Elbert	-0.21
Early	0.38	Pulaski	0.07	Gwinnett	-0.22
Laurens	0.36	Chatham	0.06	Cobb	-0.22
Dade	0.35	Habersham	0.05	Douglas	-0.23
Lumpkin	0.32	Barrow	0.05	Dougherty	-0.23
Pickens	0.31	Lanier	0.03	Columbia	-0.24
Calhoun	0.30	Atkinson	0.02	Walker	-0.24
Houston	0.30	Paulding	0.02	Forsyth	-0.24
Cherokee	0.30	Fulton	0.02	Newton	-0.25

County	Change in Percentage Reporting *Tranquilizer* Use (2015-016)	County	Change in Percentage Reporting *Tranquilizer* Use (2015-016)
Terrell	-0.32	Quitman	0.00
Bartow	-0.33	Talbot	0.00
Lowndes	-0.37	Taliaferro	0.00
Bulloch	-0.39	Treutlen	0.00
Towns	-0.40	Turner	0.00
Echols	-0.43	Warren	0.00
Madison	-0.44	Webster	0.00
Lincoln	-0.45		
Coffee	-0.47		
Dawson	-0.53		
Jones	-0.55		
Camden	-0.59		
Morgan	-0.60		
Coweta	-0.63		
Wilcox	-0.67		
Troup	-0.68		
Chattooga	-0.70		
Bleckley	-0.70		
Liberty	-0.75		
Rabun	-0.76		
Jasper	-0.78		
Macon	-0.81		
Dodge	-0.81		
Wilkinson	-0.83		
Seminole	-0.85		
Heard	-0.89		
Gordon	-0.96		
Taylor	-1.01		
Lamar	-1.04		
Lee	-1.11		
Chattahoochee	-1.12		
Monroe	-1.27		
Crawford	-1.33		
Dooly	-1.49		
Baker	0.00		
Clay	0.00		
Hancock	0.00		
Montgomery	0.00		

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County	Percent Reporting *Stimulant* Use (2016)	County	Percent Reporting *Stimulant* Use (2016)	County	Percent Reporting *Stimulant* Use (2016)
Long	3.51	Candler	1.59	Walton	1.15
Pike	3.02	Whitfield	1.58	Muscogee	1.13
Colquitt	2.96	Glynn	1.55	Dekalb	1.11
Marion	2.55	Habersham	1.55	Fulton	1.11
Bryan	2.52	Treutlen	1.55	Catoosa	1.10
Dade	2.52	Houston	1.52	Gordon	1.08
Troup	2.51	Stephens	1.51	Lowndes	1.08
Schley	2.46	Lumpkin	1.49	Talbot	1.08
Effingham	2.38	Bacon	1.47	Cobb	1.07
Evans	2.38	Miller	1.46	Grady	1.07
Monroe	2.38	Banks	1.45	Baldwin	1.06
Glascock	2.27	Floyd	1.43	Gwinnett	1.06
Meriwether	2.22	Pickens	1.41	Brantley	1.05
Mcduffie	2.21	Bibb	1.40	Terrell	1.04
Coweta	2.16	Chatham	1.40	Fannin	1.03
White	2.08	Richmond	1.40	Hall	1.01
Jenkins	2.06	Wheeler	1.40	Carroll	1.00
Washington	1.98	Hart	1.39	Clarke	1.00
Putnam	1.93	Ben Hill	1.35	Newton	1.00
Columbia	1.91	Oglethorpe	1.35	Stewart	1.00
Madison	1.91	Burke	1.34	Chattooga	.99
Franklin	1.89	Upson	1.34	Decatur	.99
Twiggs	1.88	Barrow	1.33	Bulloch	.97
Lee	1.84	Echols	1.33	Mcintosh	.97
Berrien	1.79	Heard	1.30	Polk	.97
Harris	1.77	Butts	1.28	Camden	.95
Cherokee	1.75	Spalding	1.28	Mitchell	.95
Johnson	1.71	Turner	1.26	Webster	.95
Walker	1.70	Henry	1.24	Morgan	.93
Charlton	1.69	Jackson	1.22	Warren	.91
Laurens	1.69	Liberty	1.22	Coffee	.90
Thomas	1.66	Fayette	1.21	Appling	.89
Paulding	1.65	Bartow	1.20	Atkinson	.89
Sumter	1.65	Screven	1.19	Clayton	.89
Lincoln	1.64	Wilcox	1.16	Dougherty	.89
Wayne	1.62	Oconee	1.15	Gilmer	.88

County	Percent Reporting *Stimulant* Use (2016)	County	Percent Reporting *Stimulant* Use (2016)
Jones	.86	Wilkinson	.33
Early	.84	Clinch	.30
Tattnall	.83	Calhoun	.29
Emanuel	.82	Pulaski	.28
Pierce	.81	Jeff Davis	.27
Worth	.81	Telfair	.26
Ware	.80	Baker	.00
Forsyth	.78	Clay	.00
Seminole	.78	Dooly	.00
Taylor	.78	Hancock	.00
Towns	.78	Macon	.00
Tift	.77	Montgomery	.00
Chattahoochee	.74	Quitman	.00
Jefferson	.72	Randolph	.00
Murray	.72	Taliaferro	.00
Dodge	.69		
Dawson	.63		
Douglas	.63		
Rockdale	.63		
Rabun	.60		
Crawford	.59		
Wilkes	.59		
Bleckley	.58		
Lanier	.58		
Cook	.57		
Lamar	.57		
Elbert	.56		
Irwin	.56		
Jasper	.53		
Brooks	.49		
Crisp	.49		
Greene	.49		
Toombs	.49		
Union	.46		
Peach	.42		
Haralson	.40		

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County	Change in Percentage Reporting *Stimulant* Use (2015-2016)	County	Change in Percentage Reporting *Stimulant* Use (2015-2016)	County	Change in Percentage Reporting *Stimulant* Use (2015-2016)
Long	1.70	Mcduffie	0.09	Clarke	-0.27
Charlton	1.42	Richmond	0.09	Jeff Davis	-0.27
Schley	1.33	Hall	0.07	Lee	-0.28
Sumter	1.18	Chatham	0.06	Calhoun	-0.29
Marion	1.14	Bleckley	0.03	Toombs	-0.31
Wheeler	0.84	Appling	0.02	Tift	-0.31
Echols	0.78	Spalding	0.02	Wilkes	-0.31
Laurens	0.73	Thomas	0.00	Gwinnett	-0.31
Evans	0.67	Cherokee	0.00	Glynn	-0.33
Fannin	0.62	Towns	0.00	Candler	-0.33
Franklin	0.61	Stewart	-0.02	Carroll	-0.34
Baldwin	0.60	Decatur	-0.03	Berrien	-0.36
Jenkins	0.59	Emanuel	-0.04	Cobb	-0.37
Lincoln	0.57	Coffee	-0.06	Lowndes	-0.37
Meriwether	0.55	Morgan	-0.06	Douglas	-0.39
Heard	0.53	Dougherty	-0.06	Crisp	-0.39
Pickens	0.51	Walton	-0.08	Forsyth	-0.39
Hart	0.50	Whitfield	-0.11	Liberty	-0.40
Bacon	0.48	Fulton	-0.12	Upson	-0.40
Habersham	0.47	Dekalb	-0.12	Tattnall	-0.43
White	0.45	Warren	-0.12	Murray	-0.44
Colquitt	0.43	Wayne	-0.13	Banks	-0.44
Brantley	0.40	Harris	-0.14	Catoosa	-0.45
Atkinson	0.32	Bibb	-0.15	Walker	-0.46
Johnson	0.31	Mcintosh	-0.17	Monroe	-0.46
Butts	0.29	Union	-0.17	Houston	-0.46
Pike	0.26	Elbert	-0.18	Cook	-0.47
Pierce	0.25	Clayton	-0.18	Columbia	-0.47
Bryan	0.23	Jefferson	-0.19	Gilmer	-0.49
Turner	0.23	Screven	-0.19	Rockdale	-0.49
Treutlen	0.23	Ben Hill	-0.22	Camden	-0.50
Lumpkin	0.22	Newton	-0.23	Effingham	-0.51
Paulding	0.22	Lanier	-0.24	Bulloch	-0.55
Seminole	0.18	Grady	-0.24	Stephens	-0.55
Polk	0.14	Webster	-0.25	Henry	-0.57
Floyd	0.14	Chattahoochee	-0.26	Gordon	-0.59
Washington	0.13	Madison	-0.26	Barrow	-0.62
Putnam	0.10	Peach	-0.27	Telfair	-0.63

County	Change in Percentage Reporting *Stimulant* Use (2015-2016)
Jackson	-0.63
Wilcox	-0.64
Haralson	-0.66
Muscogee	-0.66
Chattooga	-0.67
Fayette	-0.69
Clinch	-0.69
Early	-0.69
Mitchell	-0.69
Oglethorpe	-0.72
Burke	-0.73
Rabun	-0.75
Coweta	-0.76
Crawford	-0.85
Wilkinson	-0.87
Bartow	-0.90
Troup	-0.92
Oconee	-0.93
Dodge	-0.95
Glascock	-0.95
Terrell	-0.96
Brooks	-1.03
Jones	-1.04
Ware	-1.10
Dawson	-1.14
Jasper	-1.26
Irwin	-1.33
Taylor	-1.37
Worth	-1.51
Pulaski	-1.56
Dade	-1.57
Lamar	-1.84
Baker	0.00
Clay	0.00
Dooly	0.00
Greene	0.00
Hancock	0.00
Macon	0.00

County	Change in Percentage Reporting *Stimulant* Use (2015-2016)
Miller	0.00
Montgomery	0.00
Quitman	0.00
Randolph	0.00
Talbot	0.00
Taliaferro	0.00
Twiggs	0.00

County	Percent Reporting *Alcohol* Use (2016)	County	Percent Reporting *Alcohol* Use (2016)	County	Percent Reporting *Alcohol* Use (2016)
Seminole	23.44	Mcduffie	13.25	Oconee	11.74
Wilkes	19.06	Montgomery	13.09	Coffee	11.70
Pierce	18.34	Brantley	13.07	Bibb	11.68
Irwin	18.33	White	13.06	Johnson	11.60
Treutlen	18.04	Burke	13.02	Upson	11.55
Turner	17.99	Washington	13.01	Thomas	11.53
Miller	17.96	Pickens	13.00	Webster	11.43
Charlton	17.42	Bryan	12.99	Glynn	11.32
Pike	16.94	Monroe	12.84	Grady	11.27
Colquitt	16.79	Wilkinson	12.67	Floyd	11.10
Long	16.24	Walker	12.64	Bulloch	11.09
Worth	16.11	Fannin	12.60	Laurens	11.06
Stewart	16.00	Tattnall	12.60	Liberty	11.05
Taylor	15.89	Lee	12.57	Mitchell	10.95
Effingham	15.76	Morgan	12.55	Gordon	10.84
Banks	15.56	Houston	12.41	Paulding	10.82
Hart	15.37	Telfair	12.37	Marion	10.76
Troup	15.20	Stephens	12.31	Elbert	10.72
Peach	14.92	Jasper	12.30	Echols	10.67
Coweta	14.82	Cherokee	12.28	Early	10.65
Oglethorpe	14.70	Berrien	12.26	Richmond	10.60
Wilcox	14.67	Polk	12.22	Catoosa	10.55
Lincoln	14.47	Tift	12.20	Fayette	10.42
Glascock	14.39	Franklin	12.19	Bartow	10.41
Jackson	14.24	Dade	12.18	Carroll	10.40
Ware	14.23	Toombs	12.17	Whitfield	10.39
Bacon	14.22	Wayne	12.05	Wheeler	10.23
Crawford	13.91	Jones	12.02	Towns	10.20
Gilmer	13.86	Meriwether	12.00	Jefferson	10.13
Madison	13.74	Ben Hill	11.84	Pulaski	10.08
Butts	13.57	Talbot	11.83	Atkinson	10.06
Putnam	13.54	Warren	11.82	Evans	10.05
Schley	13.52	Columbia	11.78	Lumpkin	10.02
Candler	13.49	Rabun	11.78	Barrow	9.93
Chattooga	13.48	Walton	11.77	Henry	9.93
Harris	13.38	Habersham	11.76	Baker	9.88

County	Percent Reporting *Alcohol* Use (2016)
Haralson	9.78
Lanier	9.62
Jeff Davis	9.55
Appling	9.31
Lowndes	9.22
Clarke	9.16
Union	9.10
Taliaferro	9.09
Greene	9.00
Cook	8.96
Dooly	8.94
Hall	8.93
Clayton	8.92
Spalding	8.88
Jenkins	8.64
Camden	8.59
Muscogee	8.59
Murray	8.53
Cobb	8.45
Decatur	8.45
Chatham	8.39
Screven	8.30
Gwinnett	8.25
Baldwin	8.13
Newton	8.12
Fulton	7.93
Dekalb	7.87
Dawson	7.77
Emanuel	7.74
Dodge	7.70
Forsyth	7.66
Terrell	7.61
Calhoun	7.60
Dougherty	7.59
Douglas	7.55
Crisp	7.32

County	Percent Reporting *Alcohol* Use (2016)
Randolph	7.30
Clinch	7.23
Chattahoochee	7.01
Hancock	7.01
Twiggs	6.88
Rockdale	6.71
Brooks	6.37
Bleckley	6.04
Sumter	5.37
Lamar	5.17
Heard	4.55
Quitman	4.08
Clay	3.85
Macon	3.48
Mcintosh	2.91

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County	Change in Percentage Reporting *Alcohol* Use (2015-2016)	County	Change in Percentage Reporting *Alcohol* Use (2015-2016)	County	Change in Percentage Reporting *Alcohol* Use (2015-2016)
Dooly	1.57	Thomas	-7.13	Houston	-10.10
Greene	1.54	White	-7.20	Decatur	-10.11
Baker	0.57	Banks	-7.34	Fulton	-10.12
Peach	0.17	Emanuel	-7.37	Dodge	-10.21
BenHill	0.00	Calhoun	-7.40	Lanier	-10.45
Clay	0.00	Appling	-7.53	Paulding	-10.60
Crawford	0.00	Stephens	-7.57	Montgomery	-10.61
Crisp	0.00	Haralson	-7.93	Tattnall	-10.66
JeffDavis	0.00	Jackson	-7.94	Wheeler	-10.82
Taliaferro	0.00	Fayette	-8.03	Glascock	-10.83
Wilkes	0.00	Colquitt	-8.29	Jones	-10.99
Candler	-0.38	Oconee	-8.32	Bryan	-11.04
Stewart	-0.67	Towns	-8.32	Floyd	-11.04
Talbot	-0.67	Walker	-8.34	Bulloch	-11.08
Warren	-0.68	Clayton	-8.61	Pierce	-11.10
Fannin	-0.71	Gwinnett	-8.67	Early	-11.25
Putnam	-0.71	Jenkins	-8.68	Habersham	-11.28
Cook	-1.25	Ware	-8.75	Union	-11.36
Miller	-1.52	Carroll	-8.80	Glynn	-11.46
Hart	-1.55	Hall	-8.81	Macon	-11.60
Wilkinson	-2.18	Walton	-8.85	Twiggs	-11.64
Seminole	-2.20	Chatham	-8.89	Jefferson	-11.67
Turner	-2.20	Burke	-8.90	Pike	-11.68
Charlton	-2.65	Coweta	-9.03	Mcintosh	-11.69
Baldwin	-3.33	Gordon	-9.11	Treutlen	-11.73
Atkinson	-4.23	Johnson	-9.12	Monroe	-11.78
Franklin	-4.52	Telfair	-9.26	Muscogee	-11.80
Irwin	-4.70	Coffee	-9.30	Schley	-11.87
Tift	-4.89	Elbert	-9.41	Toombs	-11.87
Jasper	-4.91	Forsyth	-9.51	Douglas	-12.22
Chattooga	-5.36	Ben Hill	-9.65	Rockdale	-12.34
Whitfield	-5.41	Grady	-9.70	Cherokee	-12.41
Washington	-6.06	Troup	-9.71	Hancock	-12.48
Taylor	-6.11	Cobb	-10.02	Harris	-12.59
Meriwether	-6.14	Dekalb	-10.02	Mitchell	-12.63
Pickens	-6.15	Gilmer	-10.05	Clarke	-12.74
Bibb	-6.73	Catoosa	-10.07	Dade	-12.75
Laurens	-6.86	Dawson	-10.10	Brooks	-12.77

County	Change in Percentage Reporting *Alcohol* Use (2015-2016)
Barrow	-13.11
Lowndes	-13.17
Effingham	-13.45
Richmond	-13.51
Henry	-13.62
Polk	-13.67
Bacon	-13.70
Liberty	-13.78
Murray	-13.92
Wayne	-13.93
Camden	-14.02
Long	-14.10
Echols	-14.11
Berrien	-14.15
Lumpkin	-14.16
Wilcox	-14.23
Lincoln	-14.33

County	Change in Percentage Reporting *Alcohol* Use (2015-2016)
Madison	-14.46
Oglethorpe	-14.47
Pulaski	-14.63
Marion	-14.64
Columbia	-14.74
Randolph	-14.75
Chattahoochee	-14.78
Bartow	-14.88
Spalding	-15.12
Dougherty	-15.79
Brantley	-16.05
Sumter	-16.20
Morgan	-16.34
Newton	-16.93
Evans	-17.29
Worth	-17.34
Mcduffie	-17.41

County	Change in Percentage Reporting *Alcohol* Use (2015-2016)
Heard	-17.44
Terrell	-17.93
Butts	-19.09
Lee	-19.16
Clinch	-19.68
Screven	-20.59
Rabun	-20.89
Jeff Davis	-21.37
Quitman	-22.90
Bleckley	-23.31
Webster	-24.68
Lamar	-29.15
Upson	-38.45

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APPENDIX B: NATIONAL POISONING SYSTEM DATA, RANKED BY COUNTY

County	Any poisoning rate (2016)	County	Any poisoning rate (2016)	County	Any poisoning rate (2016)
Pickens	20.38	Harris	4.69	Douglas	0.99
Gwinnett	18.98	Long	4.51	Clayton	0.61
Brooks	16.50	Jones	4.37	Fayette	0.42
Screven	16.22	Newton	4.35	Calhoun	0.00
Coweta	15.86	Fulton	4.20	Charlton	0.00
Baker	15.77	Burke	4.19	Chattooga	0.00
Ben Hill	15.74	Muscogee	4.14	Clay	0.00
Glascock	12.79	Clarke	4.08	Early	0.00
Jackson	11.18	Effingham	3.96	Echols	0.00
Appling	11.12	Dawson	3.82	Emanuel	0.00
Carroll	10.78	Henry	3.52	Hancock	0.00
Banks	10.62	McIntosh	3.35	Heard	0.00
Thomas	9.69	Toombs	3.34	Jasper	0.00
Gordon	9.66	Lowndes	3.34	Jefferson	0.00
Miller	9.51	DeKalb	3.27	Johnson	0.00
Towns	9.44	Rockdale	3.26	Lee	0.00
Crisp	8.81	Camden	3.14	Lincoln	0.00
Coffee	8.50	Stephens	3.13	Macon	0.00
Bartow	8.47	Worth	3.06	Marion	0.00
Sumter	8.16	Tift	3.05	Montgomery	0.00
Upson	7.49	Peach	3.03	Oglethorpe	0.00
Treutlen	7.38	Dougherty	2.91	Pulaski	0.00
Bleckley	7.31	Pierce	2.81	Putnam	0.00
Chatham	7.25	Bryan	2.72	Quitman	0.00
Colquitt	7.16	Cherokee	2.61	Spalding	0.00
Union	7.08	Dade	2.30	Stewart	0.00
Hall	7.05	Walker	2.29	Taliaferro	0.00
Houston	6.96	Pike	2.25	Tattnall	0.00
Monroe	6.78	Laurens	2.21	Taylor	0.00
Paulding	6.66	Floyd	2.11	Terrell	0.00
Clinch	6.66	Grady	2.11	Warren	0.00
Richmond	6.08	Madison	1.97	Wayne	0.00
Forsyth	5.99	Glynn	1.93	Webster	0.00
Bulloch	5.98	Haralson	1.84	Wilkes	0.00
Fannin	5.52	Decatur	1.82	Catoosa	0.00
Seminole	5.39	Cobb	1.80	Columbia	-0.34
Murray	5.06	Walton	1.69	Troup	-1.37
Bibb	4.97	Oconee	1.52	Berrien	-2.21
Washington	4.80	Ware	1.38	Lamar	-2.30

County	Any poisoning rate (2016)	County	Any poisoning rate (2016)	County	Any poisoning rate (2016)
Hart	-2.41	Bacon	-4.96	Mitchell	-7.82
Lumpkin	-2.46	Elbert	-4.98	Candler	-8.27
Barrow	-2.60	Atkinson	-5.13	Twiggs	-8.33
Polk	-3.16	Habersham	-5.49	Evans	-8.94
Telfair	-3.16	Wilcox	-5.52	Lanier	-9.03
Jeff Davis	-3.26	Baldwin	-5.67	McDuffie	-9.37
Dooly	-3.66	Butts	-5.76	Schley	-9.69
Brantley	-3.68	Morgan	-5.92	Crawford	-10.01
Greene	-3.85	Gilmer	-6.39	Meriwether	-10.48
Whitfield	-3.86	White	-7.47	Liberty	-10.61
Wilkinson	-4.14	Talbot	-7.66	Rabun	-14.46
Turner	-4.71	Franklin	-7.72	Cook	-15.22
Chattahoochee	-4.84	Dodge	-7.73	Irwin	-15.96
Jenkins	-4.87	Randolph	-7.75	Wheeler	-33.76

County	Change in *Any Poisoning* Rate (2012-2016)	County	Change in *Any Poisoning* Rate (2012-2016)	County	Change in *Any Poisoning* Rate (2012-2016)
Pickens	20.38	Harris	4.69	Douglas	0.99
Gwinnett	18.98	Long	4.51	Clayton	0.61
Brooks	16.50	Jones	4.37	Fayette	0.42
Screven	16.22	Newton	4.35	Calhoun	0.00
Coweta	15.86	Fulton	4.20	Charlton	0.00
Baker	15.77	Burke	4.19	Chattooga	0.00
Ben Hill	15.74	Muscogee	4.14	Clay	0.00
Glascock	12.79	Clarke	4.08	Early	0.00
Jackson	11.18	Effingham	3.96	Echols	0.00
Appling	11.12	Dawson	3.82	Emanuel	0.00
Carroll	10.78	Henry	3.52	Hancock	0.00
Banks	10.62	McIntosh	3.35	Heard	0.00
Thomas	9.69	Toombs	3.34	Jasper	0.00
Gordon	9.66	Lowndes	3.34	Jefferson	0.00
Miller	9.51	DeKalb	3.27	Johnson	0.00
Towns	9.44	Rockdale	3.26	Lee	0.00
Crisp	8.81	Camden	3.14	Lincoln	0.00
Coffee	8.50	Stephens	3.13	Macon	0.00
Bartow	8.47	Worth	3.06	Marion	0.00
Sumter	8.16	Tift	3.05	Montgomery	0.00
Upson	7.49	Peach	3.03	Oglethorpe	0.00
Treutlen	7.38	Dougherty	2.91	Pulaski	0.00
Bleckley	7.31	Pierce	2.81	Putnam	0.00
Chatham	7.25	Bryan	2.72	Quitman	0.00
Colquitt	7.16	Cherokee	2.61	Spalding	0.00
Union	7.08	Dade	2.30	Stewart	0.00
Hall	7.05	Walker	2.29	Taliaferro	0.00
Houston	6.96	Pike	2.25	Tattnall	0.00
Monroe	6.78	Laurens	2.21	Taylor	0.00
Paulding	6.66	Floyd	2.11	Terrell	0.00
Clinch	6.66	Grady	2.11	Warren	0.00
Richmond	6.08	Madison	1.97	Wayne	0.00
Forsyth	5.99	Glynn	1.93	Webster	0.00
Bulloch	5.98	Haralson	1.84	Wilkes	0.00
Fannin	5.52	Decatur	1.82	Catoosa	0.00
Seminole	5.39	Cobb	1.80	Columbia	-0.34
Murray	5.06	Walton	1.69	Troup	-1.37
Bibb	4.97	Oconee	1.52	Berrien	-2.21
Washington	4.80	Ware	1.38	Lamar	-2.30

County	Change in *Any Poisoning* Rate (2012-2016)	County	Change in *Any Poisoning* Rate (2012-2016)	County	Change in *Any Poisoning* Rate (2012-2016)
Hart	-2.41	Bacon	-4.96	Mitchell	-7.82
Lumpkin	-2.46	Elbert	-4.98	Candler	-8.27
Barrow	-2.60	Atkinson	-5.13	Twiggs	-8.33
Polk	-3.16	Habersham	-5.49	Evans	-8.94
Telfair	-3.16	Wilcox	-5.52	Lanier	-9.03
Jeff Davis	-3.26	Baldwin	-5.67	McDuffie	-9.37
Dooly	-3.66	Butts	-5.76	Schley	-9.69
Brantley	-3.68	Morgan	-5.92	Crawford	-10.01
Greene	-3.85	Gilmer	-6.39	Meriwether	-10.48
Whitfield	-3.86	White	-7.47	Liberty	-10.61
Wilkinson	-4.14	Talbot	-7.66	Rabun	-14.46
Turner	-4.71	Franklin	-7.72	Cook	-15.22
Chattahoochee	-4.84	Dodge	-7.73	Irwin	-15.96
Jenkins	-4.87	Randolph	-7.75	Wheeler	-33.76

County	Opiate Poisoning Rate (2016)	County	Opiate Poisoning Rate (2016)	County	Opiate Poisoning Rate (2016)
Miller	19.01	Walton	1.69	Candler	0.00
Lanier	9.03	Henry	1.68	Charlton	0.00
Twiggs	8.33	Fulton	1.63	Chattahoochee	0.00
Ben Hill	6.75	Baldwin	1.62	Chattooga	0.00
Jeff Davis	6.52	Coweta	1.59	Clay	0.00
Appling	5.56	Floyd	1.58	Clinch	0.00
Toombs	5.01	Harris	1.56	Cook	0.00
Bleckley	4.88	Cherokee	1.52	Crawford	0.00
Coffee	4.25	Ware	1.38	Crisp	0.00
Dawson	3.82	Bryan	1.36	Decatur	0.00
Jackson	3.73	Sumter	1.36	Dodge	0.00
Houston	3.64	Richmond	1.35	Dooly	0.00
Troup	3.42	Paulding	1.33	Early	0.00
Muscogee	3.36	Newton	1.31	Echols	0.00
Brooks	3.30	Glynn	1.29	Effingham	0.00
Habersham	3.30	Fayette	1.27	Emanuel	0.00
Colquitt	3.07	Dougherty	1.25	Evans	0.00
Morgan	2.96	Cobb	1.24	Fannin	0.00
Putnam	2.72	DeKalb	1.21	Gilmer	0.00
Gordon	2.64	Clarke	1.13	Glascock	0.00
Franklin	2.57	Forsyth	1.12	Grady	0.00
Murray	2.53	Gwinnett	1.12	Greene	0.00
Elbert	2.49	Laurens	1.10	Hancock	0.00
Thomas	2.42	Rockdale	1.09	Hart	0.00
Camden	2.36	Columbia	1.02	Heard	0.00
Dade	2.30	Douglas	0.99	Irwin	0.00
Monroe	2.26	Carroll	0.98	Jasper	0.00
Whitfield	2.14	Lowndes	0.91	Jefferson	0.00
Burke	2.10	Clayton	0.81	Jenkins	0.00
Bibb	2.04	Barrow	0.65	Johnson	0.00
Pickens	2.04	Liberty	0.56	Jones	0.00
Tift	2.04	Atkinson	0.00	Lamar	0.00
Chatham	2.02	Bacon	0.00	Lee	0.00
Bulloch	1.99	Baker	0.00	Lincoln	0.00
Butts	1.92	Banks	0.00	Long	0.00
Upson	1.87	Bartow	0.00	Lumpkin	0.00
Haralson	1.84	Berrien	0.00	Macon	0.00
Hall	1.83	Brantley	0.00	Madison	0.00
Tattnall	1.72	Calhoun	0.00	Marion	0.00

County	Opiate Poisoning Rate (2016)		County	Opiate Poisoning Rate (2016)		County	Opiate Poisoning Rate (2016)
McDuffie	0.00		Randolph	0.00		Turner	0.00
McIntosh	0.00		Schley	0.00		Union	0.00
Meriwether	0.00		Screven	0.00		Walker	0.00
Mitchell	0.00		Seminole	0.00		Warren	0.00
Montgomery	0.00		Spalding	0.00		Washington	0.00
Oconee	0.00		Stephens	0.00		Wayne	0.00
Oglethorpe	0.00		Stewart	0.00		Webster	0.00
Peach	0.00		Talbot	0.00		Wheeler	0.00
Pierce	0.00		Taliaferro	0.00		White	0.00
Pike	0.00		Taylor	0.00		Wilcox	0.00
Polk	0.00		Telfair	0.00		Wilkes	0.00
Pulaski	0.00		Terrell	0.00		Wilkinson	0.00
Quitman	0.00		Towns	0.00		Worth	0.00
Rabun	0.00		Treutlen	0.00		Catoosa	0.00

County	*Opiate* Poisoning Rate Change (2012-2016)	County	*Opiate* Poisoning Rate Change (2012-2016)	County	*Opiate* Poisoning Rate Change (2012-2016)
Miller	19.01	Troup	0.68	Heard	0.00
Lanier	9.03	Columbia	0.68	Irwin	0.00
Twiggs	8.33	Henry	0.50	Jasper	0.00
Ben Hill	6.75	Paulding	0.44	Jenkins	0.00
Jeff Davis	6.52	Cherokee	0.44	Johnson	0.00
Appling	5.56	Dougherty	0.42	Jones	0.00
Bleckley	4.88	Douglas	0.33	Lamar	0.00
Dawson	3.82	Bibb	0.29	Lee	0.00
Brooks	3.30	Clayton	0.20	Lincoln	0.00
Coffee	3.19	Cobb	0.07	Long	0.00
Morgan	2.96	Atkinson	0.00	Lowndes	0.00
Putnam	2.72	Bacon	0.00	Lumpkin	0.00
Franklin	2.57	Baker	0.00	Madison	0.00
Elbert	2.49	Banks	0.00	Marion	0.00
Thomas	2.42	Brantley	0.00	McIntosh	0.00
Dade	2.30	Bulloch	0.00	Mitchell	0.00
Monroe	2.26	Calhoun	0.00	Montgomery	0.00
Jackson	2.24	Camden	0.00	Oconee	0.00
Burke	2.10	Carroll	0.00	Oglethorpe	0.00
Colquitt	2.04	Charlton	0.00	Pierce	0.00
Pickens	2.04	Chattooga	0.00	Pike	0.00
Butts	1.92	Clarke	0.00	Quitman	0.00
Gordon	1.76	Clay	0.00	Randolph	0.00
Tattnall	1.72	Clinch	0.00	Screven	0.00
Toombs	1.67	Crawford	0.00	Seminole	0.00
Coweta	1.59	Crisp	0.00	Stephens	0.00
Harris	1.56	Decatur	0.00	Stewart	0.00
Muscogee	1.55	Dodge	0.00	Talbot	0.00
Chatham	1.52	Early	0.00	Taliaferro	0.00
Bryan	1.36	Echols	0.00	Taylor	0.00
Houston	1.33	Emanuel	0.00	Telfair	0.00
Murray	1.26	Fannin	0.00	Terrell	0.00
Gwinnett	1.12	Gilmer	0.00	Towns	0.00
Hall	1.04	Glascock	0.00	Treutlen	0.00
Richmond	0.90	Grady	0.00	Turner	0.00
Newton	0.87	Greene	0.00	Union	0.00
Whitfield	0.86	Hancock	0.00	Warren	0.00
DeKalb	0.85	Haralson	0.00	Washington	0.00
Fayette	0.85	Hart	0.00	Webster	0.00

County	Opiate Poisoning Rate Change (2012-2016)	County	Opiate Poisoning Rate Change (2012-2016)	County	Opiate Poisoning Rate Change (2012-2016)
White	0.00	Peach	-1.01	Jefferson	-2.81
Wilcox	0.00	Polk	-1.05	Chattahoochee	-2.90
Wilkes	0.00	Floyd	-1.06	Macon	-3.29
Wilkinson	0.00	Barrow	-1.30	Habersham	-3.30
Worth	0.00	Sumter	-1.36	Rabun	-3.62
Catoosa	0.00	Wayne	-1.50	Dooly	-3.66
Fulton	-0.05	Baldwin	-1.62	Ware	-4.13
Bartow	-0.47	Tift	-2.04	Candler	-4.14
Rockdale	-0.54	Laurens	-2.21	Evans	-4.47
Glynn	-0.64	Berrien	-2.21	Pulaski	-5.22
Forsyth	-0.75	McDuffie	-2.34	Upson	-5.62
Walker	-0.76	Spalding	-2.50	Cook	-6.09
Effingham	-0.79	Meriwether	-2.62	Wheeler	-8.44
Walton	-0.85	Liberty	-2.79	Schley	-9.69

County	Sedative Poisoning Rate (2016)	County	Sedative Poisoning Rate (2016)	County	Sedative Poisoning Rate (2016)
Upson	16.85	Clinch	6.66	Cook	3.04
Baker	15.77	Dougherty	6.64	Oconee	3.04
Ben Hill	15.74	Habersham	6.59	Peach	3.03
Pulaski	15.67	Bartow	6.59	Whitfield	3.00
Pickens	14.27	Jeff Davis	6.52	Morgan	2.96
Ware	13.77	Richmond	6.31	Chattahoochee	2.90
Jackson	13.41	Chatham	6.07	Pierce	2.81
Toombs	13.36	Taylor	6.02	Jefferson	2.81
Dodge	12.88	Walton	5.93	Barrow	2.60
Floyd	11.62	Baldwin	5.67	Murray	2.53
Crisp	11.02	Newton	5.66	Elbert	2.49
Thomas	10.90	Bulloch	5.58	Bleckley	2.44
Towns	9.44	Wilkes	5.56	McDuffie	2.34
Worth	9.19	Fannin	5.52	Dade	2.30
Emanuel	8.87	Haralson	5.51	Lamar	2.30
Gordon	8.78	Putnam	5.45	Walker	2.29
Hall	8.62	Sumter	5.44	Berrien	2.21
Muscogee	8.53	Seminole	5.39	Gilmer	2.13
Bibb	8.47	Coffee	5.31	Burke	2.10
Wheeler	8.44	Clarke	4.99	Lee	1.96
Grady	8.42	DeKalb	4.70	Mitchell	1.96
Liberty	8.37	Cherokee	4.57	Butts	1.92
Glynn	8.37	Henry	4.53	Harris	1.56
Appling	8.34	Evans	4.47	Jones	1.46
Coweta	8.33	Rockdale	4.34	Lumpkin	1.23
Gwinnett	7.82	Clayton	4.25	Polk	1.05
Laurens	7.73	Spalding	4.17	Columbia	0.34
Franklin	7.72	Wilkinson	4.14	Atkinson	0.00
Paulding	7.55	Candler	4.14	Bacon	0.00
Carroll	7.51	Cobb	4.01	Banks	0.00
Wayne	7.50	Camden	3.93	Brantley	0.00
Houston	7.29	Decatur	3.64	Bryan	0.00
Colquitt	7.16	Douglas	3.64	Calhoun	0.00
Tift	7.12	Union	3.54	Charlton	0.00
Forsyth	7.12	Brooks	3.30	Chattooga	0.00
Troup	6.85	Macon	3.29	Clay	0.00
Fayette	6.77	Screven	3.24	Crawford	0.00
Lowndes	6.67	Effingham	3.17	Dawson	0.00
Fulton	6.66	Stephens	3.13	Dooly	0.00

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County	Sedative Poisoning Rate (2016)	County	Sedative Poisoning Rate (2016)	County	Sedative Poisoning Rate (2016)
Early	0.00	Madison	0.00	Talbot	0.00
Echols	0.00	Marion	0.00	Taliaferro	0.00
Glascock	0.00	McIntosh	0.00	Tattnall	0.00
Greene	0.00	Meriwether	0.00	Telfair	0.00
Hancock	0.00	Miller	0.00	Terrell	0.00
Hart	0.00	Monroe	0.00	Treutlen	0.00
Heard	0.00	Montgomery	0.00	Turner	0.00
Irwin	0.00	Oglethorpe	0.00	Twiggs	0.00
Jasper	0.00	Pike	0.00	Warren	0.00
Jenkins	0.00	Quitman	0.00	Washington	0.00
Johnson	0.00	Rabun	0.00	Webster	0.00
Lanier	0.00	Randolph	0.00	White	0.00
Lincoln	0.00	Schley	0.00	Wilcox	0.00
Long	0.00	Stewart	0.00	Catoosa	0.00

County	Sedative Poisoning Rate Change (2012-2016)	County	Sedative Poisoning Rate Change (2012-2016)	County	Sedative Poisoning Rate Change (2012-2016)
Baker	15.77	Elbert	2.49	Dawson	0.00
Ben Hill	13.50	Chatham	2.36	Dooly	0.00
Jackson	11.92	Henry	2.18	Early	0.00
Thomas	8.48	Rockdale	2.17	Echols	0.00
Pickens	8.15	Coffee	2.13	Glascock	0.00
Upson	7.49	Walton	2.12	Habersham	0.00
Colquitt	6.13	Fayette	2.12	Hancock	0.00
Worth	6.13	Floyd	2.11	Heard	0.00
Gwinnett	5.58	Grady	2.11	Irwin	0.00
Appling	5.56	Burke	2.10	Jasper	0.00
Fannin	5.52	Tift	2.04	Johnson	0.00
Seminole	5.39	Cherokee	1.96	Lincoln	0.00
Gordon	5.27	Glynn	1.93	Long	0.00
Pulaski	5.22	Richmond	1.80	Macon	0.00
Coweta	5.16	Fulton	1.68	Marion	0.00
Dodge	5.15	Clayton	1.62	McIntosh	0.00
Towns	4.72	Harris	1.56	Miller	0.00
Emanuel	4.43	Walker	1.53	Montgomery	0.00
Crisp	4.41	Oconee	1.52	Newton	0.00
Bartow	4.23	Jones	1.46	Pierce	0.00
Wilkinson	4.14	Murray	1.26	Pike	0.00
Candler	4.14	Cobb	1.24	Quitman	0.00
Forsyth	4.12	DeKalb	1.21	Schley	0.00
Sumter	4.08	Laurens	1.10	Stephens	0.00
Paulding	4.00	Effingham	0.79	Stewart	0.00
Carroll	3.92	Lowndes	0.61	Talbot	0.00
Decatur	3.64	Douglas	0.33	Taliaferro	0.00
Bulloch	3.59	Bacon	0.00	Taylor	0.00
Hall	3.40	Banks	0.00	Terrell	0.00
Houston	3.31	Berrien	0.00	Treutlen	0.00
Brooks	3.30	Bleckley	0.00	Twiggs	0.00
Screven	3.24	Brantley	0.00	Warren	0.00
Bibb	3.21	Bryan	0.00	Washington	0.00
Clarke	3.17	Calhoun	0.00	Wayne	0.00
Peach	3.03	Chattooga	0.00	Webster	0.00
Jefferson	2.81	Clay	0.00	Wilcox	0.00
Ware	2.75	Clinch	0.00	Wilkes	0.00
Dougherty	2.49	Dade	0.00	Catoosa	0.00

County	Sedative Poisoning Rate Change (2012-2016)	County	Sedative Poisoning Rate Change (2012-2016)	County	Sedative Poisoning Rate Change (2012-2016)
Columbia	-0.34	Baldwin	-2.43	Jenkins	-4.87
Polk	-1.05	Meriwether	-2.62	Atkinson	-5.13
Lumpkin	-1.23	Putnam	-2.72	Whitfield	-5.15
Muscogee	-1.29	Morgan	-2.96	Franklin	-5.15
Troup	-1.37	Oglethorpe	-3.02	Jeff Davis	-6.52
Spalding	-1.67	Camden	-3.14	McDuffie	-7.03
Toombs	-1.67	Telfair	-3.16	Union	-7.08
Butts	-1.92	Tattnall	-3.43	Chattahoochee	-7.74
Barrow	-1.95	Haralson	-3.67	Randolph	-7.75
Mitchell	-1.96	White	-3.73	Liberty	-8.37
Lee	-1.96	Greene	-3.85	Wheeler	-8.44
Madison	-1.97	Charlton	-4.21	Lanier	-9.03
Monroe	-2.26	Gilmer	-4.26	Crawford	-10.01
Lamar	-2.30	Evans	-4.47	Rabun	-10.85
Hart	-2.41	Turner	-4.71	Cook	-12.17

County	Stimulant Poisoning Rate (2016)	County	Stimulant Poisoning Rate (2016)	County	Stimulant Poisoning Rate (2016)
Evans	8.94	Walker	1.53	Butts	0.00
Irwin	7.98	Oconee	1.52	Calhoun	0.00
Ben Hill	4.50	Chatham	1.52	Candler	0.00
Charlton	4.21	Wayne	1.50	Chattooga	0.00
Coweta	3.97	Bartow	1.41	Clarke	0.00
Madison	3.94	Ware	1.38	Clay	0.00
Haralson	3.67	Troup	1.37	Clayton	0.00
Forsyth	3.37	Sumter	1.36	Clinch	0.00
Liberty	3.35	Carroll	1.31	Coffee	0.00
Toombs	3.34	Barrow	1.30	Cook	0.00
Brooks	3.30	Murray	1.26	Crawford	0.00
Glynn	3.22	Lumpkin	1.23	Crisp	0.00
Camden	3.14	Lowndes	1.21	Dade	0.00
Harris	3.13	DeKalb	1.21	Dawson	0.00
Worth	3.06	Gwinnett	1.12	Decatur	0.00
Tift	3.05	Habersham	1.10	Dodge	0.00
Jones	2.91	Cherokee	1.09	Dooly	0.00
Chattahoochee	2.90	Rockdale	1.09	Early	0.00
Bryan	2.72	Polk	1.05	Echols	0.00
Banks	2.66	Colquitt	1.02	Elbert	0.00
Floyd	2.64	Columbia	1.02	Fannin	0.00
Gordon	2.64	Henry	1.01	Gilmer	0.00
Franklin	2.57	Houston	0.99	Glascock	0.00
Baldwin	2.43	Paulding	0.89	Grady	0.00
Effingham	2.38	Bibb	0.88	Greene	0.00
Muscogee	2.33	Whitfield	0.86	Hancock	0.00
Pike	2.25	Walton	0.85	Hart	0.00
Jackson	2.24	Cobb	0.69	Heard	0.00
Emanuel	2.22	Dougherty	0.42	Jasper	0.00
Newton	2.18	Douglas	0.33	Jeff Davis	0.00
Pickens	2.04	Hall	0.26	Jefferson	0.00
Bulloch	1.99	Appling	0.00	Jenkins	0.00
Upson	1.87	Atkinson	0.00	Johnson	0.00
Tattnall	1.72	Bacon	0.00	Lamar	0.00
Fayette	1.69	Baker	0.00	Lanier	0.00
Spalding	1.67	Berrien	0.00	Laurens	0.00
Richmond	1.58	Bleckley	0.00	Lee	0.00
Stephens	1.56	Brantley	0.00	Lincoln	0.00
Fulton	1.53	Burke	0.00	Long	0.00

County	Stimulant Poisoning Rate (2016)		County	Stimulant Poisoning Rate (2016)		County	Stimulant Poisoning Rate (2016)
Macon	0.00		Putnam	0.00		Towns	0.00
Marion	0.00		Quitman	0.00		Treutlen	0.00
McDuffie	0.00		Rabun	0.00		Turner	0.00
McIntosh	0.00		Randolph	0.00		Twiggs	0.00
Meriwether	0.00		Schley	0.00		Union	0.00
Miller	0.00		Screven	0.00		Warren	0.00
Mitchell	0.00		Seminole	0.00		Washington	0.00
Monroe	0.00		Stewart	0.00		Webster	0.00
Montgomery	0.00		Talbot	0.00		Wheeler	0.00
Morgan	0.00		Taliaferro	0.00		White	0.00
Oglethorpe	0.00		Taylor	0.00		Wilcox	0.00
Peach	0.00		Telfair	0.00		Wilkes	0.00
Pierce	0.00		Terrell	0.00		Wilkinson	0.00
Pulaski	0.00		Thomas	0.00		Catoosa	0.00

County	Stimulant Poisoning Rate Change (2012-2016)	County	Stimulant Poisoning Rate Change (2012-2016)	County	Stimulant Poisoning Rate Change (2012-2016)
Irwin	7.98	Lowndes	0.30	Lee	0.00
Evans	4.47	Cherokee	0.22	Lincoln	0.00
Charlton	4.21	Atkinson	0.00	Long	0.00
Madison	3.94	Bacon	0.00	Lumpkin	0.00
Toombs	3.34	Baker	0.00	Macon	0.00
Brooks	3.30	Barrow	0.00	Marion	0.00
Harris	3.13	Bleckley	0.00	McDuffie	0.00
Worth	3.06	Brantley	0.00	McIntosh	0.00
Tift	3.05	Butts	0.00	Miller	0.00
Jones	2.91	Calhoun	0.00	Monroe	0.00
Chattahoochee	2.90	Candler	0.00	Montgomery	0.00
Banks	2.66	Carroll	0.00	Morgan	0.00
Glynn	2.57	Chattooga	0.00	Murray	0.00
Coweta	2.38	Clay	0.00	Muscogee	0.00
Pike	2.25	Columbia	0.00	Oglethorpe	0.00
Ben Hill	2.25	Crawford	0.00	Paulding	0.00
Jackson	2.24	Dade	0.00	Peach	0.00
Pickens	2.04	Dawson	0.00	Pierce	0.00
Bulloch	1.99	Dooly	0.00	Pulaski	0.00
Upson	1.87	Early	0.00	Putnam	0.00
Haralson	1.84	Echols	0.00	Quitman	0.00
Floyd	1.58	Effingham	0.00	Randolph	0.00
Camden	1.57	Emanuel	0.00	Rockdale	0.00
Stephens	1.56	Franklin	0.00	Schley	0.00
Walker	1.53	Gilmer	0.00	Screven	0.00
Oconee	1.52	Glascock	0.00	Seminole	0.00
Bryan	1.36	Greene	0.00	Stewart	0.00
Sumter	1.36	Gwinnett	0.00	Talbot	0.00
Newton	1.31	Hancock	0.00	Taliaferro	0.00
Liberty	1.12	Hart	0.00	Taylor	0.00
Gordon	0.88	Heard	0.00	Telfair	0.00
Baldwin	0.81	Jasper	0.00	Terrell	0.00
Bartow	0.47	Jeff Davis	0.00	Towns	0.00
DeKalb	0.43	Jefferson	0.00	Treutlen	0.00
Forsyth	0.37	Jenkins	0.00	Troup	0.00
Chatham	0.34	Johnson	0.00	Turner	0.00
Henry	0.34	Lamar	0.00	Twiggs	0.00
Douglas	0.33	Lanier	0.00	Ware	0.00

County	Stimulant Poisoning Rate Change (2012-2016)	County	Stimulant Poisoning Rate Change (2012-2016)	County	Stimulant Poisoning Rate Change (2012-2016)
Warren	0.00	Houston	-0.99	Berrien	-2.21
Washington	0.00	Colquitt	-1.02	Thomas	-2.42
Webster	0.00	Polk	-1.05	Dodge	-2.58
Wheeler	0.00	Coffee	-1.06	Meriwether	-2.62
Whitfield	0.00	Habersham	-1.10	Fannin	-2.76
Wilkes	0.00	Walton	-1.27	Appling	-2.78
Wilkinson	0.00	Hall	-1.31	Wayne	-3.00
Catoosa	0.00	Dougherty	-1.66	Cook	-3.04
Richmond	-0.23	Tattnall	-1.72	Rabun	-3.62
Bibb	-0.29	Decatur	-1.82	Mitchell	-3.91
Fulton	-0.44	White	-1.87	Elbert	-4.98
Clayton	-0.81	Clarke	-2.04	Wilcox	-5.52
Spalding	-0.83	Burke	-2.10	Laurens	-6.63
Fayette	-0.85	Grady	-2.11	Clinch	-6.66
Cobb	-0.90	Crisp	-2.20	Union	-7.08

County	Ethanol Poisoning Rate (2016)	County	Ethanol Poisoning Rate (2016)	County	Ethanol Poisoning Rate (2016)
Pulaski	5.22	Baldwin	0.81	Dooly	0.00
Berrien	4.43	Muscogee	0.78	Dougherty	0.00
McIntosh	3.35	Forsyth	0.75	Early	0.00
Gwinnett	3.35	Troup	0.68	Echols	0.00
Putnam	2.72	DeKalb	0.64	Effingham	0.00
Washington	2.40	Bartow	0.47	Elbert	0.00
Pickens	2.04	Whitfield	0.43	Emanuel	0.00
White	1.87	Walton	0.42	Evans	0.00
Chatham	1.69	Douglas	0.33	Fannin	0.00
Liberty	1.67	Richmond	0.23	Floyd	0.00
Rockdale	1.63	Henry	0.17	Franklin	0.00
Camden	1.57	Appling	0.00	Gilmer	0.00
Harris	1.56	Atkinson	0.00	Glascock	0.00
Oconee	1.52	Bacon	0.00	Glynn	0.00
Wayne	1.50	Baker	0.00	Grady	0.00
Jackson	1.49	Banks	0.00	Greene	0.00
Fulton	1.48	Ben Hill	0.00	Hancock	0.00
Bibb	1.46	Bleckley	0.00	Haralson	0.00
Bryan	1.36	Brantley	0.00	Hart	0.00
Clarke	1.36	Brooks	0.00	Heard	0.00
Carroll	1.31	Burke	0.00	Irwin	0.00
Hall	1.31	Butts	0.00	Jasper	0.00
Barrow	1.30	Calhoun	0.00	Jeff Davis	0.00
Fayette	1.27	Candler	0.00	Jefferson	0.00
Thomas	1.21	Charlton	0.00	Jenkins	0.00
Bulloch	1.20	Chattooga	0.00	Johnson	0.00
Coweta	1.19	Clay	0.00	Jones	0.00
Laurens	1.10	Clayton	0.00	Lamar	0.00
Habersham	1.10	Clinch	0.00	Lanier	0.00
Colquitt	1.02	Coffee	0.00	Lee	0.00
Houston	0.99	Columbia	0.00	Lincoln	0.00
Chattahoochee	0.97	Cook	0.00	Long	0.00
Lowndes	0.91	Crawford	0.00	Lumpkin	0.00
Cobb	0.90	Crisp	0.00	Macon	0.00
Paulding	0.89	Dade	0.00	Madison	0.00
Gordon	0.88	Dawson	0.00	Marion	0.00
Cherokee	0.87	Decatur	0.00	McDuffie	0.00
Spalding	0.83	Dodge	0.00	Meriwether	0.00

County	Ethanol Poisoning Rate (2016)	County	Ethanol Poisoning Rate (2016)	County	Ethanol Poisoning Rate (2016)
Miller	0.00	Schley	0.00	Treutlen	0.00
Mitchell	0.00	Screven	0.00	Turner	0.00
Monroe	0.00	Seminole	0.00	Twiggs	0.00
Montgomery	0.00	Stephens	0.00	Union	0.00
Morgan	0.00	Stewart	0.00	Upson	0.00
Murray	0.00	Sumter	0.00	Walker	0.00
Newton	0.00	Talbot	0.00	Ware	0.00
Oglethorpe	0.00	Taliaferro	0.00	Warren	0.00
Peach	0.00	Tattnall	0.00	Webster	0.00
Pierce	0.00	Taylor	0.00	Wheeler	0.00
Pike	0.00	Telfair	0.00	Wilcox	0.00
Polk	0.00	Terrell	0.00	Wilkes	0.00
Quitman	0.00	Tift	0.00	Wilkinson	0.00
Rabun	0.00	Toombs	0.00	Worth	0.00
Randolph	0.00	Towns	0.00	Catoosa	0.00

County	Ethanol Poisoning Rate Change (2012-2016)	County	Ethanol Poisoning Rate Change (2012-2016)	County	Ethanol Poisoning Rate Change (2012-2016)
Pulaski	5.22	Bibb	0.00	Jefferson	0.00
Berrien	4.43	Bleckley	0.00	Jenkins	0.00
McIntosh	3.35	Brantley	0.00	Johnson	0.00
Gwinnett	3.35	Brooks	0.00	Jones	0.00
Putnam	2.72	Bulloch	0.00	Lamar	0.00
Washington	2.40	Burke	0.00	Lanier	0.00
Pickens	2.04	Butts	0.00	Lee	0.00
Liberty	1.67	Calhoun	0.00	Lincoln	0.00
Rockdale	1.63	Candler	0.00	Long	0.00
Harris	1.56	Charlton	0.00	Lumpkin	0.00
Oconee	1.52	Chattooga	0.00	Macon	0.00
Wayne	1.50	Clay	0.00	Madison	0.00
Bryan	1.36	Clinch	0.00	Marion	0.00
Hall	1.31	Cook	0.00	McDuffie	0.00
Barrow	1.30	Crawford	0.00	Meriwether	0.00
Fayette	1.27	Crisp	0.00	Miller	0.00
Laurens	1.10	Dade	0.00	Mitchell	0.00
Habersham	1.10	Dawson	0.00	Monroe	0.00
Colquitt	1.02	Decatur	0.00	Montgomery	0.00
Carroll	0.98	Dooly	0.00	Murray	0.00
Lowndes	0.91	Early	0.00	Muscogee	0.00
Paulding	0.89	Echols	0.00	Oglethorpe	0.00
Chatham	0.84	Effingham	0.00	Peach	0.00
Baldwin	0.81	Elbert	0.00	Pierce	0.00
Camden	0.79	Emanuel	0.00	Pike	0.00
Jackson	0.75	Evans	0.00	Polk	0.00
Fulton	0.54	Fannin	0.00	Quitman	0.00
Bartow	0.47	Franklin	0.00	Rabun	0.00
Clarke	0.45	Glascock	0.00	Randolph	0.00
Coweta	0.40	Glynn	0.00	Schley	0.00
Douglas	0.33	Gordon	0.00	Screven	0.00
Cobb	0.28	Greene	0.00	Seminole	0.00
Richmond	0.23	Hancock	0.00	Stephens	0.00
Cherokee	0.22	Hart	0.00	Stewart	0.00
Appling	0.00	Heard	0.00	Sumter	0.00
Atkinson	0.00	Henry	0.00	Talbot	0.00
Bacon	0.00	Houston	0.00	Taliaferro	0.00
Baker	0.00	Jasper	0.00	Tattnall	0.00
Banks	0.00	Jeff Davis	0.00	Taylor	0.00

County	Ethanol Poisoning Rate Change (2012-2016)	County	Ethanol Poisoning Rate Change (2012-2016)	County	Ethanol Poisoning Rate Change (2012-2016)
Telfair	0.00	Whitfield	0.00	Chattahoochee	-0.97
Terrell	0.00	Wilcox	0.00	Tift	-1.02
Thomas	0.00	Wilkes	0.00	Floyd	-1.06
Toombs	0.00	Wilkinson	0.00	Coffee	-1.06
Towns	0.00	Catoosa	0.00	Haralson	-1.84
Treutlen	0.00	DeKalb	-0.07	Grady	-2.11
Turner	0.00	Columbia	-0.34	Gilmer	-2.13
Twiggs	0.00	Dougherty	-0.42	Ben Hill	-2.25
Upson	0.00	Troup	-0.68	Dodge	-2.58
Walker	0.00	Forsyth	-0.75	Morgan	-2.96
Ware	0.00	Clayton	-0.81	Worth	-3.06
Warren	0.00	Spalding	-0.83	Union	-3.54
Webster	0.00	Walton	-0.85	Irwin	-7.98
White	0.00	Newton	-0.87	Wheeler	-8.44

County	Total Number of *all Drug* Seizures (2014-2016)	County	Total Number of *all Drug* Seizures (2014-2016)	County	Total Number of *all Drug* Seizures (2014-2016)
Gwinnett	3433	Baldwin	438	Union	161
Cobb	3344	Jackson	429	Upson	161
Fulton	3187	Murray	428	Gilmer	159
Carroll	1790	Fayette	427	Liberty	151
Whitfield	1787	Dougherty	426	Jeff Davis	145
Cherokee	1662	Spalding	406	Morgan	141
Hall	1518	Monroe	381	Toombs	139
Richmond	1478	Pickens	380	Miller	137
Muscogee	1443	Franklin	378	Camden	132
Dekalb	1303	Glynn	376	Lee	131
Bartow	1275	Lumpkin	356	Thomas	129
Walker	1137	Dodge	354	Fannin	124
Paulding	1109	Elbert	344	Tattnall	121
Floyd	1108	Polk	343	Bacon	118
Henry	1100	Chattooga	332	Brooks	117
Chatham	1031	Jones	315	Taylor	115
Douglas	1019	Rabun	305	Wilkinson	112
Clayton	926	Bryan	284	Lamar	110
Haralson	853	Harris	283	Telfair	110
Gordon	852	Hart	271	Putnam	109
Houston	820	Laurens	271	Towns	108
Coweta	797	Meriwether	261	Decatur	105
Habersham	687	Wayne	261	Worth	103
Walton	674	Stephens	248	Tift	101
White	658	Peach	243	Bleckley	100
Brantley	611	Dawson	238	Jasper	100
Newton	609	Madison	237	Long	98
Columbia	603	Mcintosh	224	Crawford	97
Rockdale	583	Heard	217	Oglethorpe	97
Barrow	570	Emanuel	216	Atkinson	93
Ware	570	Crisp	211	Charlton	90
Clarke	554	Pierce	211	Mcduffie	89
Forsyth	549	Ben Hill	206	Cook	87
Troup	525	Butts	198	Oconee	87
Banks	501	Seminole	185	Berrien	82
Bulloch	496	Effingham	175	Greene	69
Catoosa	492	Appling	164	Randolph	67
Bibb	482	Colquitt	163	Twiggs	66
Coffee	452	Dade	161	Pike	64

County	Total Number of *all Drug* Seizures (2014-2016)
Grady	63
Chattahoochee	60
Sumter	60
Washington	59
Johnson	57
Mitchell	57
Dooly	53
Lowndes	50
Wilkes	47
Screven	45
Schley	42
Jefferson	40
Wilcox	37
Irwin	36
Clinch	34
Calhoun	33
Candler	32
Turner	32
Marion	31
Burke	30
Lincoln	25
Treutlen	23
Montgomery	21
Evans	16
Lanier	16
Wheeler	13
Macon	12
Clay	10
Early	10
Pulaski	10
Taliaferro	10
Echols	9
Terrell	9
Jenkins	8
Warren	8
Hancock	6
Glascock	5
Talbot	5
Quitman	3

County	Total Number of *all Drug* Seizures (2014-2016)
Stewart	3
Baker	0
Webster	0

County	Rate of *all Drug* Seizures (2014-2016)	County	Rate of *all Drug* Seizures (2014-2016)	County	Rate of *all Drug* Seizures (2014-2016)
Brantley	3299.7	Stephens	961.5	Lamar	603.3
Haralson	2954.7	Jeff Davis	953.9	Taliaferro	594
Banks	2695.5	Randolph	946.9	Johnson	584.7
Mcintosh	2580.6	Baldwin	942.8	Coweta	574.9
White	2329.5	Emanuel	929.2	Newton	572
Miller	2311.1	Crisp	899.3	Long	561.7
Seminole	2066.9	Peach	892.9	Laurens	558.3
Rabun	1868.8	Appling	877.3	Gilmer	549.7
Heard	1865.9	Wayne	854.8	Houston	538.7
Elbert	1760.8	Harris	846	Fannin	518.3
Whitfield	1710.1	Butts	834.8	Calhoun	507.5
Madison	1700.6	Polk	821	Putnam	506.2
Franklin	1696.4	Bryan	809	Cook	503.8
Dodge	1665.3	Schley	802.9	Toombs	501.4
Walker	1654.3	Twiggs	791.7	Henry	500.8
Ware	1587.2	Hall	781.9	Clinch	496.5
Habersham	1554.6	Bleckley	780.2	Wilkes	474.4
Carroll	1548.6	Crawford	778.9	Tattnall	467.2
Gordon	1498.3	Morgan	778.7	Chattahoochee	462.1
Monroe	1384.6	Brooks	756.6	Dougherty	457.4
Taylor	1373.8	Walton	756.5	Cobb	454.5
Chattooga	1319	Barrow	751.3	Glynn	451.1
Pickens	1257.5	Troup	744	Clarke	448.6
Bartow	1232.6	Catoosa	739.6	Lee	435
Meriwether	1231.9	Union	736.7	Berrien	431.1
Wilkinson	1188.6	Jasper	726.8	Columbia	423.4
Ben Hill	1164.4	Richmond	725.8	Greene	419.6
Floyd	1146.5	Paulding	721.7	Wilcox	414.6
Lumpkin	1123	Douglas	718	Turner	403
Atkinson	1115.1	Cherokee	703.6	Fayette	388
Pierce	1088.5	Muscogee	700.3	Gwinnett	383.6
Jones	1085.3	Bulloch	676.9	Irwin	381.8
Murray	1082.1	Jackson	675.7	Decatur	380.9
Hart	1057.5	Charlton	671.1	Worth	379.6
Bacon	1031.8	Telfair	666.8	Dooly	374.3
Coffee	1029.5	Oglethorpe	663.8	Chatham	360.5
Dawson	1010.6	Rockdale	652.9	Pike	352.3
Towns	984.7	Spalding	627	Colquitt	345.1
Dade	973.3	Upson	604.3	Clayton	343.4

County	Rate of _all Drug_ Seizures (2014-2016)
Treutlen	341.9
Clay	331.9
Lincoln	326.4
Screven	315.4
Fulton	312.9
Mcduffie	312.6
Bibb	309.4
Effingham	307.8
Candler	289.9
Washington	285.2
Thomas	283.4
Forsyth	262.7
Camden	251
Mitchell	247
Oconee	246.7
Tift	246.5
Jefferson	245.6
Grady	245.2
Montgomery	232.7
Liberty	231.3
Marion	224.1
Echols	220
Sumter	192.9
Dekalb	179.4
Wheeler	161.5
Glascock	159.3
Lanier	149.4
Warren	146.5
Evans	146.4
Burke	130.4
Quitman	127.6
Terrell	100.8
Early	95.3
Pulaski	87.1
Jenkins	86.1
Talbot	78.8
Hancock	69.5
Macon	55.1
Stewart	51.9

County	Rate of _all Drug_ Seizures (2014-2016)
Lowndes	43.1
Baker	0
Webster	0

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County	Total Number of *Stimulant* Seizures (2014-2016)
Cobb	1297
Gwinnett	963
Whitfield	876
Cherokee	781
Carroll	744
Fulton	665
Bartow	637
Hall	617
Paulding	616
Muscogee	569
Gordon	560
Haralson	547
Walker	536
DeKalb	475
Floyd	463
Douglas	447
Henry	409
Richmond	370
Clayton	360
Habersham	346
Coweta	312
White	298
Walton	284
Forsyth	274
Newton	261
Barrow	260
Rockdale	260
Murray	248
Troup	245
Columbia	244
Houston	241
Pickens	217
Catoosa	212
Monroe	209
Chatham	197
Banks	194
Baldwin	190
Brantley	181
Jackson	179

County	Total Number of *Stimulant* Seizures (2014-2016)
Jones	165
Dawson	164
Chattooga	159
Spalding	156
Bulloch	150
Ware	149
Coffee	146
Polk	145
Rabun	142
Franklin	141
Stephens	136
Meriwether	131
Hart	128
Bibb	116
Ben Hill	114
Elbert	114
Lumpkin	109
Madison	109
Laurens	101
Dougherty	98
Emanuel	98
Dodge	97
Clarke	85
Pierce	83
Upson	83
Crisp	82
Gilmer	81
Harris	80
Seminole	80
Peach	79
Butts	78
Glynn	76
Union	70
Colquitt	68
Telfair	65
Bryan	64
Heard	64
Tift	59
Fayette	57

County	Total Number of *Stimulant* Seizures (2014-2016)
Lee	56
Fannin	54
Crawford	53
Lamar	53
Brooks	52
Effingham	52
Morgan	52
Jasper	51
Wayne	51
Oconee	50
Thomas	49
Atkinson	48
Appling	47
McDuffie	46
Miller	46
Grady	45
Jeff Davis	44
Putnam	44
Toombs	43
Dade	41
Decatur	40
Cook	37
Bacon	36
Tattnall	34
Berrien	33
Camden	33
Chattahoochee	33
McIntosh	33
Towns	31
Worth	31
Liberty	30
Taylor	29
Wilcox	27
Charlton	26
Long	26
Pike	26
Bleckley	25
Wilkinson	25
Irwin	23

County	Total Number of *Stimulant* Seizures (2014-2016)
Mitchell	23
Oglethorpe	23
Schley	20
Greene	19
Twiggs	18
Dooly	17
Johnson	17
Montgomery	17
Sumter	17
Washington	17
Jefferson	16
Lanier	16
Screven	16
Clinch	14
Burke	11
Evans	8
Marion	8
Macon	7
Pulaski	7
Warren	7
Hancock	6
Lincoln	6
Lowndes	5
Wilkes	5
Candler	4
Early	4
Jenkins	4
Randolph	4
Talbot	4
Turner	4
Wheeler	4
Glascock	3
Stewart	3
Treutlen	3
Clay	2
Taliaferro	2
Terrell	2
Echols	1
Quitman	1

County	Total Number of *Stimulant* Seizures (2014-2016)
Baker	0
Calhoun	0
Webster	0

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County	Rate of *Stimulant* Seizures (2014-2016)	County	Rate of *Stimulant* Seizures (2014-2016)	County	Rate of *Stimulant* Seizures (2014-2016)
Haralson	1894.8	Jasper	370.7	Cook	214.3
White	1055	Crisp	349.5	Laurens	208.1
Banks	1043.8	Troup	347.2	Bulloch	204.7
Gordon	984.8	Polk	347.1	Clinch	204.4
Brantley	977.5	Taylor	346.4	Putnam	204.3
Seminole	893.8	Lumpkin	343.8	Bleckley	195.1
Rabun	870.1	Barrow	342.7	Charlton	193.9
Whitfield	838.3	Brooks	336.3	Montgomery	188.4
Habersham	782.9	Coffee	332.5	Henry	186.2
Madison	782.1	Cherokee	330.6	Lee	186
Walker	779.9	Butts	328.9	Bryan	182.3
Miller	776	Union	320.3	Richmond	181.7
Monroe	759.6	Catoosa	318.7	Cobb	176.3
Pickens	718.1	Walton	318.7	Grady	175.1
Dawson	696.4	Hall	317.8	Johnson	174.4
Ben Hill	644.4	Douglas	315	Berrien	173.5
Carroll	643.7	Bacon	314.8	Columbia	171.3
Franklin	632.8	Upson	311.5	Wayne	167
Chattooga	631.7	Wilcox	302.6	McDuffie	161.6
Murray	627	Rockdale	291.2	Houston	158.3
Meriwether	618.3	Lamar	290.7	Oglethorpe	157.4
Bartow	615.8	Peach	290.3	Toombs	155.1
Elbert	583.5	Jeff Davis	289.5	Lanier	149.4
Atkinson	575.5	Morgan	287.2	Long	149
Jones	568.5	Towns	282.6	Decatur	145.1
Heard	550.3	Jackson	281.9	Colquitt	144
Stephens	527.3	Gilmer	280	Tift	144
Hart	499.5	Muscogee	276.1	Pike	143.1
Floyd	479.1	Wilkinson	265.3	Oconee	141.8
Dodge	456.3	Chattahoochee	254.2	Clayton	133.5
Pierce	428.2	Appling	251.4	Tattnall	131.3
Crawford	425.6	Dade	247.9	Forsyth	131.1
Emanuel	421.6	Newton	245.1	Warren	128.2
Ware	414.9	Irwin	244	Dooly	120.1
Baldwin	409	Spalding	240.9	Taliaferro	118.8
Paulding	400.9	Harris	239.2	Greene	115.5
Telfair	394	Fannin	225.7	Worth	114.3
Schley	382.3	Coweta	225	Screven	112.1
McIntosh	380.2	Twiggs	215.9	Thomas	107.7

County	Rate of *Stimulant* Seizures (2014-2016)
Gwinnett	107.6
Dougherty	105.2
Mitchell	99.7
Jefferson	98.2
Glascock	95.6
Effingham	91.5
Glynn	91.2
Washington	82.2
Lincoln	78.3
Bibb	74.5
Evans	73.2
Hancock	69.5
Chatham	68.9
Clarke	68.8
Clay	66.4
DeKalb	65.4
Fulton	65.3
Talbot	63
Camden	62.8
Pulaski	61
Marion	57.8
Randolph	56.5
Sumter	54.6
Stewart	51.9
Fayette	51.8
Wilkes	50.5
Turner	50.4
Wheeler	49.7
Burke	47.8
Liberty	45.9
Treutlen	44.6
Jenkins	43
Quitman	42.5
Early	38.1
Candler	36.2
Macon	32.1
Echols	24.4
Terrell	22.4
Lowndes	4.3

County	Rate of *Stimulant* Seizures (2014-2016)
Baker	0
Calhoun	0
Webster	0

County	Total Number of *Depressant* Seizures (2014-2016)	County	Total Number of *Depressant* Seizures (2014-2016)	County	Total Number of *Depressant* Seizures (2014-2016)
Fulton	702	Haralson	45	Dade	17
Gwinnett	439	Heard	42	Wilkinson	17
Cobb	431	Monroe	42	Emanuel	16
Hall	239	Brantley	40	Pierce	15
Richmond	236	Gordon	38	Thomas	15
Chatham	186	Chattooga	36	Union	15
Cherokee	176	Coffee	34	Upson	15
DeKalb	165	Dodge	34	Jeff Davis	14
Floyd	153	Franklin	34	Pickens	13
Carroll	146	Harris	33	Colquitt	12
Clayton	141	Jackson	33	Cook	11
Houston	141	Baldwin	32	Dawson	11
Muscogee	140	Effingham	31	Oglethorpe	11
Henry	137	Spalding	31	Sumter	11
Bartow	117	White	31	Charlton	10
Whitfield	114	Tattnall	28	Jasper	10
Douglas	113	Appling	27	Lee	10
Paulding	109	Banks	27	Madison	10
Coweta	106	Dougherty	27	Morgan	10
Walker	103	Stephens	26	Putnam	10
Habersham	92	Laurens	25	Bacon	9
Walton	78	McIntosh	25	Dooly	9
Fayette	76	Seminole	25	Bleckley	8
Newton	76	Murray	24	Lamar	8
Columbia	67	Wayne	24	Lowndes	8
Rockdale	63	Camden	22	Miller	8
Bibb	61	Jones	22	Toombs	8
Forsyth	61	Liberty	22	Ben Hill	7
Lumpkin	61	Rabun	22	Gilmer	7
Bulloch	60	Butts	21	Crawford	6
Catoosa	60	Meriwether	21	Long	6
Troup	58	Crisp	19	Pike	6
Ware	58	Elbert	19	Taylor	6
Barrow	56	Hart	19	Decatur	5
Glynn	56	Polk	19	Lincoln	5
Bryan	54	Brooks	18	Telfair	5
Clarke	51	Fannin	18	Jefferson	4
Peach	47	Twiggs	18	Johnson	4

County	Total Number of *Depressant* Seizures (2014-2016)
Oconee	4
Towns	4
Turner	4
Washington	4
Atkinson	3
Burke	3
Candler	3
Greene	3
McDuffie	3
Screven	3
Wilcox	3
Worth	3
Berrien	2
Clinch	2
Early	2
Evans	2
Irwin	2
Montgomery	2
Randolph	2
Taliaferro	2
Tift	2
Treutlen	2
Wilkes	2
Calhoun	1
Chattahoochee	1
Grady	1
Marion	1
Mitchell	1
Terrell	1
Wheeler	1
Baker	0
Clay	0
Echols	0
Glascock	0
Hancock	0
Jenkins	0
Lanier	0
Macon	0

County	Total Number of *Depressant* Seizures (2014-2016)
Pulaski	0
Quitman	0
Schley	0
Stewart	0
Talbot	0
Warren	0
Webster	0

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County	Rate of *Depressant* Seizures (2014-2016)	County	Rate of *Depressant* Seizures (2014-2016)	County	Rate of *Depressant* Seizures (2014-2016)
Heard	361.1	Catoosa	90.2	Henry	62.4
McIntosh	288	Butts	88.5	Murray	60.7
Seminole	279.3	Walton	87.5	Cobb	58.6
Brantley	216	Troup	82.2	Upson	56.3
Twiggs	215.9	Bulloch	81.9	Morgan	55.2
Habersham	208.2	Crisp	81	Effingham	54.5
Lumpkin	192.4	Douglas	79.6	Clayton	52.3
Wilkinson	180.4	Bacon	78.7	Jackson	52
Peach	172.7	Wayne	78.6	Laurens	51.5
Ware	161.5	Coffee	77.4	Turner	50.4
Dodge	159.9	Pierce	77.4	Gwinnett	49.1
Floyd	158.3	Coweta	76.5	Crawford	48.2
Haralson	155.9	Jones	75.8	Spalding	47.9
Bryan	153.8	Oglethorpe	75.3	Columbia	47
Franklin	152.6	Fannin	75.2	Dawson	46.7
Monroe	152.6	Charlton	74.6	Putnam	46.4
Walker	149.9	Cherokee	74.5	Polk	45.5
Banks	145.3	Hart	74.1	Lamar	43.9
Appling	144.4	Barrow	73.8	Pickens	43
Chattooga	143	Jasper	72.7	Camden	41.8
Miller	135	Madison	71.8	Clarke	41.3
Rabun	134.8	Taylor	71.7	Johnson	41
Carroll	126.3	Newton	71.4	Ben Hill	39.6
Hall	123.1	Paulding	70.9	Bibb	39.2
Taliaferro	118.8	Rockdale	70.5	Towns	36.5
Brooks	116.4	Fayette	69.1	Atkinson	36
Richmond	115.9	Baldwin	68.9	Sumter	35.4
Bartow	113.1	Fulton	68.9	Long	34.4
White	109.7	Emanuel	68.8	Liberty	33.7
Whitfield	109.1	Union	68.6	Wilcox	33.6
Tattnall	108.1	Muscogee	67.9	Lee	33.2
Dade	102.8	Glynn	67.2	Pike	33
Stephens	100.8	Gordon	66.8	Thomas	33
Meriwether	99.1	Lincoln	65.3	Telfair	30.3
Harris	98.7	Chatham	65	Treutlen	29.7
Elbert	97.3	Cook	63.7	Clinch	29.2
Houston	92.6	Dooly	63.6	Forsyth	29.2
Jeff Davis	92.1	Bleckley	62.4	Dougherty	29

County	Rate of *Depressant* Seizures (2014-2016)
Toombs	28.9
Randolph	28.3
Candler	27.2
Colquitt	25.4
Jefferson	24.6
Gilmer	24.2
DeKalb	22.7
Montgomery	22.2
Irwin	21.2
Screven	21
Wilkes	20.2
Washington	19.3
Early	19.1
Evans	18.3
Greene	18.2
Decatur	18.1
Calhoun	15.4
Burke	13
Wheeler	12.4
Oconee	11.3
Terrell	11.2
Worth	11.1
Berrien	10.5
McDuffie	10.5
Chattahoochee	7.7
Marion	7.2
Lowndes	6.9
Tift	4.9
Mitchell	4.3
Grady	3.9
Baker	0
Clay	0
Echols	0
Glascock	0
Hancock	0
Jenkins	0
Lanier	0
Macon	0

County	Rate of *Depressant* Seizures (2014-2016)
Pulaski	0
Quitman	0
Schley	0
Stewart	0
Talbot	0
Warren	0
Webster	0

County	Total Number of *Opioid* Seizures (2014-2016)	County	Total Number of *Opioid* Seizures (2014-2016)	County	Total Number of *Opioid* Seizures (2014-2016)
Fulton	717	Spalding	102	Camden	39
Cobb	559	Baldwin	101	Miller	38
Gwinnett	422	Dougherty	101	Emanuel	37
Richmond	411	Forsyth	99	Morgan	36
Carroll	351	Jackson	97	Randolph	36
Cherokee	340	Rockdale	95	Long	35
Whitfield	339	Polk	90	Charlton	34
Hall	317	Elbert	89	McDuffie	34
Walker	291	Catoosa	84	Putnam	33
Chatham	289	Haralson	84	Stephens	33
DeKalb	279	Pierce	84	Worth	33
Muscogee	272	Banks	80	Brooks	32
Floyd	252	Chattooga	79	Peach	32
Bartow	234	McIntosh	79	Seminole	32
Henry	212	Murray	79	Decatur	31
Coweta	207	Pickens	69	Upson	31
Clarke	202	Jones	68	Gilmer	29
Brantley	201	Laurens	67	Johnson	29
Houston	200	Butts	65	Oglethorpe	29
Douglas	198	Harris	60	Tattnall	29
Ware	198	Bryan	59	Ben Hill	27
Clayton	184	Taylor	59	Dawson	26
Bulloch	152	Meriwether	58	Bleckley	25
Fayette	148	Monroe	58	Greene	25
Coffee	146	Dade	56	Thomas	25
Columbia	145	Lumpkin	56	Telfair	24
Paulding	143	Effingham	55	Bacon	23
Glynn	141	Madison	53	Fannin	23
Walton	139	Wilkinson	52	Union	23
Habersham	131	Lee	51	Cook	22
Barrow	126	Crisp	48	Lamar	22
Bibb	126	Liberty	46	Tift	22
Troup	125	Hart	45	Wilkes	21
Gordon	115	Jeff Davis	44	Atkinson	19
Dodge	113	Colquitt	43	Berrien	18
Wayne	111	Appling	42	Jasper	17
White	103	Heard	41	Washington	17
Franklin	102	Rabun	41	Turner	16
Newton	102	Toombs	40	Clinch	15

County	Total Number of *Opioid* Seizures (2014-2016)
Marion	15
Sumter	15
Twiggs	15
Crawford	14
Dooly	13
Oconee	13
Calhoun	11
Candler	11
Lowndes	10
Pike	10
Chattahoochee	9
Lincoln	9
Screven	9
Mitchell	8
Schley	8
Jefferson	7
Towns	7
Irwin	6
Burke	5
Treutlen	5
Clay	4
Grady	4
Macon	3
Wilcox	3
Early	2
Echols	2
Evans	2
Jenkins	2
Quitman	2
Terrell	2
Wheeler	2
Glascock	1
Montgomery	1
Pulaski	1
Taliaferro	1
Baker	0
Hancock	0
Lanier	0
Stewart	0

County	Total Number of *Opioid* Seizures (2014-2016)
Talbot	0
Warren	0
Webster	0

County	Rate of *Opioid* Seizures (2014-2016)	County	Rate of *Opioid* Seizures (2014-2016)	County	Rate of *Opioid* Seizures (2014-2016)
Brantley	1085.5	Polk	215.4	Douglas	139.5
McIntosh	910.1	Wilkes	212	Laurens	138
Taylor	704.8	Monroe	210.8	Fayette	134.5
Miller	641	Bulloch	207.4	Clay	132.8
Wilkinson	551.8	Brooks	206.9	Muscogee	132
Ware	551.4	Crisp	204.6	Houston	131.4
Dodge	531.6	Gordon	202.2	Stephens	127.9
Randolph	508.8	Richmond	201.8	Cook	127.4
Franklin	457.8	Turner	201.5	Catoosa	126.3
Elbert	455.6	Bacon	201.1	Jasper	123.6
Pierce	433.3	Long	200.6	Worth	121.6
Banks	430.4	Murray	199.7	Lamar	120.7
Walker	423.4	Morgan	198.8	McDuffie	119.4
Madison	380.3	Oglethorpe	198.5	Peach	117.6
White	364.7	Bleckley	195.1	Lincoln	117.5
Wayne	363.5	Twiggs	179.9	Upson	116.4
Seminole	357.5	Harris	179.4	Decatur	112.5
Heard	352.5	Troup	177.1	Crawford	112.4
Dade	338.5	Lumpkin	176.7	Tattnall	112
Coffee	332.5	Hart	175.6	Dawson	110.4
Whitfield	324.4	Lee	169.4	Dougherty	108.4
Chattooga	313.9	Calhoun	169.2	Marion	108.4
Carroll	303.7	Glynn	169.2	Rockdale	106.4
Johnson	297.5	Bryan	168.1	Union	105.2
Habersham	296.4	Barrow	166.1	Columbia	101.8
Haralson	291	Clarke	163.6	Chatham	101.1
Jeff Davis	289.5	Hall	163.3	Gilmer	100.3
Butts	274.1	Emanuel	159.2	Candler	99.7
Meriwether	273.8	Spalding	157.5	Effingham	96.8
Floyd	260.8	Walton	156	Henry	96.5
Charlton	253.5	Putnam	153.3	Fannin	96.1
Rabun	251.2	Schley	152.9	Newton	95.8
Jones	234.3	Jackson	152.8	Berrien	94.6
Pickens	228.3	Ben Hill	152.6	Paulding	93.1
Atkinson	227.8	Greene	152	Dooly	91.8
Bartow	226.2	Coweta	149.3	Colquitt	91
Appling	224.7	Telfair	145.5	Quitman	85.1
Clinch	219	Toombs	144.3	Washington	82.2
Baldwin	217.4	Cherokee	143.9	Bibb	80.9

County	Rate of *Opioid* Seizures (2014-2016)
Cobb	76
Treutlen	74.3
Camden	74.2
Liberty	70.5
Fulton	70.4
Chattahoochee	69.3
Clayton	68.2
Towns	63.8
Irwin	63.6
Screven	63.1
Taliaferro	59.4
Pike	55
Thomas	54.9
Tift	53.7
Echols	48.9
Sumter	48.2
Forsyth	47.4
Gwinnett	47.2
Jefferson	43
DeKalb	38.4
Oconee	36.9
Mitchell	34.7
Wilcox	33.6
Glascock	31.9
Wheeler	24.8
Terrell	22.4
Burke	21.7
Jenkins	21.5
Early	19.1
Evans	18.3
Grady	15.6
Macon	13.8
Montgomery	11.1
Pulaski	8.7
Lowndes	8.6
Baker	0
Hancock	0
Lanier	0
Stewart	0

County	Rate of *Opioid* Seizures (2014-2016)
Talbot	0
Warren	0
Webster	0

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County	Total Number of *Other Prescription Drug* Seizures (2014-2016)	County	Total Number of *Other Prescription Drug* Seizures (2014-2016)	County	Total Number of *Other Prescription Drug* Seizures (2014-2016)
Gwinnett	1608	Coffee	126	Toombs	48
Fulton	1103	Elbert	122	Dade	47
Cobb	1055	Jackson	119	Miller	45
Carroll	549	Habersham	118	Jeff Davis	43
Muscogee	461	Spalding	117	Morgan	43
Richmond	461	Baldwin	115	Bleckley	42
Whitfield	458	Forsyth	114	Gilmer	42
DeKalb	384	Dodge	110	Colquitt	40
Cherokee	365	Harris	110	Thomas	40
Chatham	359	Bryan	107	Camden	38
Hall	345	Glynn	103	Dawson	37
Henry	342	Franklin	101	Effingham	37
Bartow	287	Rabun	100	Worth	36
Douglas	261	Troup	97	Butts	34
Clayton	241	Polk	89	Oglethorpe	34
Paulding	241	McIntosh	87	Upson	32
Floyd	240	Peach	85	Long	31
Houston	238	Pickens	81	Tattnall	30
White	226	Hart	79	Berrien	29
Clarke	216	Laurens	78	Decatur	29
Walker	207	Murray	77	Fannin	29
Banks	200	Wayne	75	Pierce	29
Dougherty	200	Monroe	72	Lamar	27
Brantley	189	Heard	70	Lowndes	27
Bibb	179	Towns	66	Mitchell	25
Haralson	177	Emanuel	65	Randolph	25
Walton	173	Madison	65	Crawford	24
Coweta	172	Crisp	62	Atkinson	23
Newton	170	Jones	60	Greene	22
Rockdale	165	Ben Hill	58	Jasper	22
Ware	165	Chattooga	58	Pike	22
Columbia	147	Liberty	53	Putnam	22
Fayette	146	Stephens	53	Calhoun	21
Gordon	139	Union	53	Taylor	21
Catoosa	136	Meriwether	51	Washington	21
Bulloch	134	Bacon	50	Charlton	20
Lumpkin	130	Appling	48	Oconee	20
Barrow	128	Seminole	48	Wilkes	19

County	Total Number of *Other Prescription Drug* Seizures (2014-2016)
Tift	18
Wilkinson	18
Chattahoochee	17
Cook	17
Screven	17
Sumter	17
Telfair	16
Brooks	15
Twiggs	15
Candler	14
Dooly	14
Lee	14
Schley	14
Grady	13
Jefferson	13
Treutlen	13
Burke	11
Turner	8
Johnson	7
Marion	7
Echols	6
McDuffie	6
Wheeler	6
Irwin	5
Lincoln	5
Taliaferro	5
Clay	4
Evans	4
Terrell	4
Wilcox	4
Clinch	3
Early	2
Jenkins	2
Macon	2
Pulaski	2
Glascock	1
Montgomery	1
Talbot	1

County	Total Number of *Other Prescription Drug* Seizures (2014-2016)
Warren	1
Baker	0
Hancock	0
Lanier	0
Quitman	0
Stewart	0
Webster	0

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County	Rate of *Other Prescription Drug* Seizures (2014-2016)	County	Rate of *Other Prescription Drug* Seizures (2014-2016)	County	Rate of *Other Prescription Drug* Seizures (2014-2016)
Banks	1076.1	Crisp	264.3	Laurens	160.7
Brantley	1020.7	Monroe	261.7	Jasper	159.9
McIntosh	1002.3	Appling	256.8	Newton	159.7
White	800.1	Taylor	250.9	Dawson	157.1
Miller	759.1	Floyd	248.3	Paulding	156.8
Elbert	624.5	Baldwin	247.5	Houston	156.4
Haralson	613.1	Wayne	245.6	Henry	155.7
Rabun	612.7	Gordon	244.4	Cherokee	154.5
Heard	601.9	Union	242.5	Berrien	152.5
Towns	601.7	Meriwether	240.7	Pierce	149.6
Seminole	536.3	Morgan	237.5	Charlton	149.1
Dodge	517.5	Oglethorpe	232.7	Lamar	148.1
Carroll	475	Chattooga	230.4	Echols	146.7
Madison	466.4	Richmond	226.4	Gilmer	145.2
Ware	459.5	Muscogee	223.7	Cobb	143.4
Franklin	453.3	Dougherty	214.7	Butts	143.3
Whitfield	438.3	Polk	213	Troup	137.5
Bacon	437.2	Jones	206.7	Greene	133.8
Lumpkin	410.1	Stephens	205.5	Clay	132.8
Randolph	353.3	Catoosa	204.4	Fayette	132.7
Harris	328.8	Murray	194.7	Worth	132.7
Ben Hill	327.8	Walton	194.2	Chattahoochee	130.9
Bleckley	327.7	Treutlen	193.2	Candler	126.8
Calhoun	322.9	Crawford	192.7	Chatham	125.5
Peach	312.3	Wilkes	191.8	Coweta	124.1
Hart	308.3	Wilkinson	191	Glynn	123.6
Bryan	304.8	Jackson	187.4	Fannin	121.2
Walker	301.2	Rockdale	184.8	Pike	121.1
Taliaferro	297	Douglas	183.9	Upson	120.1
Coffee	287	Bulloch	182.9	Screven	119.2
Dade	284.1	Spalding	180.7	Tattnall	115.8
Jeff Davis	282.9	Twiggs	179.9	Bibb	114.9
Emanuel	279.6	Gwinnett	179.7	Fulton	108.3
Bartow	277.5	Hall	177.7	Mitchell	108.3
Atkinson	275.8	Long	177.7	Decatur	105.2
Pickens	268.1	Clarke	174.9	Columbia	103.2
Schley	267.6	Toombs	173.1	Putnam	102.2
Habersham	267	Barrow	168.7	Washington	101.5

County	Rate of *Other Prescription Drug* Seizures (2014-2016)	County	Rate of *Other Prescription Drug* Seizures (2014-2016)	County	Rate of *Other Prescription Drug* Seizures (2014-2016)
Turner	100.8	Sumter	54.6	McDuffie	21.1
Dooly	98.9	Forsyth	54.5	Early	19.1
Cook	98.4	Irwin	53	Warren	18.3
Brooks	97	DeKalb	52.9	Pulaski	17.4
Telfair	97	Grady	50.6	Talbot	15.8
Clayton	89.4	Marion	50.6	Montgomery	11.1
Thomas	87.9	Burke	47.8	Macon	9.2
Colquitt	84.7	Lee	46.5	Baker	0
Liberty	81.2	Terrell	44.8	Hancock	0
Jefferson	79.8	Wilcox	44.8	Lanier	0
Wheeler	74.5	Tift	43.9	Quitman	0
Camden	72.3	Clinch	43.8	Stewart	0
Johnson	71.8	Evans	36.6	Webster	0
Lincoln	65.3	Glascock	31.9		
Effingham	65.1	Lowndes	23.3		
Oconee	56.7	Jenkins	21.5		

APPENDIX D: PRESCRIPTION DRUG MONITORING PROGRAM DATA, RANKED BY COUNTY

County	Rate of Narcotic Prescriptions Dispensed	County	Rate of Narcotic Prescriptions Dispensed	County	Rate of Narcotic Prescriptions Dispensed
Bacon	2.14	Gilmer	1.41	Dawson	1.25
Elbert	2.00	Worth	1.41	Early	1.25
Clinch	1.98	Butts	1.40	Peach	1.24
Seminole	1.96	Emanuel	1.40	Lamar	1.23
Candler	1.86	Hart	1.40	Montgomery	1.23
Polk	1.85	Jenkins	1.40	Talbot	1.23
Jeff Davis	1.84	Banks	1.39	Warren	1.23
Haralson	1.78	Spalding	1.39	Putnam	1.22
Irwin	1.75	Toombs	1.39	Bryan	1.21
Ben Hill	1.72	Bartow	1.38	Lumpkin	1.21
Twiggs	1.72	Carroll	1.38	Glascock	1.20
Atkinson	1.71	Jackson	1.38	Burke	1.18
Pierce	1.70	Wilcox	1.38	Jefferson	1.18
Chattooga	1.69	Greene	1.37	Mitchell	1.18
Ware	1.66	Miller	1.37	Habersham	1.17
Madison	1.64	Murray	1.37	Pike	1.17
Upson	1.63	Evans	1.36	Baker	1.15
Franklin	1.59	Laurens	1.36	Gordon	1.15
Berrien	1.58	Mcduffie	1.36	Johnson	1.15
Lincoln	1.57	Union	1.36	Morgan	1.15
Wilkinson	1.57	Brooks	1.35	Thomas	1.15
Turner	1.55	Jasper	1.34	Colquitt	1.14
Brantley	1.54	Barrow	1.33	Glynn	1.14
Floyd	1.53	Heard	1.33	Screven	1.13
Cook	1.52	Meriwether	1.33	Bibb	1.12
Treutlen	1.52	Wilkes	1.33	Lanier	1.11
Appling	1.51	Bleckley	1.32	Pulaski	1.09
Wayne	1.50	Jones	1.32	Lee	1.08
Crawford	1.49	White	1.31	Terrell	1.08
Pickens	1.48	Crisp	1.29	Mcintosh	1.07
Stephens	1.47	Decatur	1.29	Hall	1.06
Dodge	1.46	Tift	1.29	Walker	1.05
Oglethorpe	1.46	Tattnall	1.28	Washington	1.05
Rabun	1.43	Taylor	1.28	Houston	1.04
Towns	1.43	Effingham	1.27	Troup	1.04
Taliaferro	1.42	Monroe	1.27	Echols	1.03
Fannin	1.41	Walton	1.27	Hancock	1.03

County	Rate of Narcotic Prescriptions Dispensed
Baldwin	1.02
Newton	1.02
Paulding	1.02
Richmond	1.02
Grady	1.01
Coffee	1.00
Macon	1.00
Sumter	1.00
Dougherty	.98
Randolph	.98
Whitfield	.98
Lowndes	.97
Telfair	.97
Webster	.97
Wheeler	.97
Charlton	.96
Coweta	.96
Oconee	.96
Schley	.95
Douglas	.94
Cherokee	.93
Camden	.91
Chatham	.90
Bulloch	.89
Clay	.89
Rockdale	.89
Henry	.88
Marion	.88
Columbia	.86
Harris	.84
Calhoun	.81
Clarke	.81
Dooly	.81
Muscogee	.81
Catoosa	.80
Fayette	.75
Stewart	.73

County	Rate of Narcotic Prescriptions Dispensed
Clayton	.69
Cobb	.69
Forsyth	.68
Long	.67
Liberty	.65
Dade	.62
Gwinnett	.60
Dekalb	.56
Fulton	.55
Quitman	.39
Chattahoochee	.32

County	High Need Ranks	County	High Need Ranks	County	High Need Ranks
Ben Hill	25.92	Dade	65.21	Clarke	77.71
Colquitt	28.13	Stephens	65.21	Candler	77.75
Pickens	38.17	Toombs	65.58	Peach	78.38
Bryan	39.71	Irwin	66.25	Oconee	78.79
Putnam	43.04	Appling	66.58	Haralson	79.13
Coweta	44.33	Muscogee	66.63	Dougherty	79.67
Franklin	45.21	Troup	66.71	Brooks	79.83
Paulding	46.63	Newton	66.83	White	80.58
Sumter	47.50	Johnson	67.38	Wilkes	81.08
Cherokee	48.08	Gwinnett	67.63	Lowndes	81.13
Chatham	48.25	Habersham	68.33	Tattnall	82.58
Upson	48.42	Marion	68.88	Douglas	82.75
Thomas	48.92	Madison	69.08	Elbert	82.92
Twiggs	49.17	Ware	69.13	Monroe	83.00
Evans	50.04	Hall	69.58	Bartow	83.67
Richmond	50.67	Bulloch	69.88	Forsyth	83.75
Glynn	52.50	Effingham	70.21	Spalding	84.00
Long	52.71	Columbia	70.54	Pierce	85.17
Pike	53.17	Brantley	70.79	Cobb	85.42
Floyd	53.71	Carroll	70.92	Seminole	85.42
Harris	54.17	Fayette	71.33	Barrow	85.46
Houston	54.17	Washington	72.21	Walton	86.08
Dekalb	54.33	Clayton	72.58	Gilmer	86.42
Butts	54.79	Banks	72.67	Towns	86.58
Jackson	54.92	Hart	73.83	Screven	87.33
Burke	58.50	Bacon	73.88	Talbot	87.33
Henry	59.08	Meriwether	73.96	Decatur	87.46
Bibb	59.83	Fulton	74.42	Greene	87.67
Laurens	60.33	Emanuel	74.83	Liberty	88.17
Lumpkin	61.33	Walker	76.00	Jenkins	88.54
Baldwin	61.67	Berrien	76.08	Randolph	89.00
Whitfield	61.96	Tift	76.42	Mcduffie	89.08
Worth	62.38	Murray	76.88	Wheeler	89.13
Charlton	63.33	Lincoln	77.29	Jones	90.29
Miller	63.63	Coffee	77.50	Morgan	90.54
Wayne	64.17	Turner	77.54	Camden	91.13
Gordon	64.58	Baker	77.58	Polk	91.75

County	High Need Ranks	County	High Need Ranks	County	High Need Ranks
Fannin	92.21	Oglethorpe	97.79	Heard	108.38
Rockdale	92.79	Stewart	98.21	Chattahoochee	110.83
Clay	93.08	Chattooga	99.04	Jasper	111.92
Lee	94.33	Lanier	99.17	Webster	112.17
Taliaferro	94.50	Grady	99.54	Taylor	113.00
Atkinson	94.63	Echols	99.67	Wilkinson	113.38
Schley	95.17	Warren	101.25	Montgomery	113.88
Bleckley	95.71	Early	101.38	Wilcox	114.08
Jeff Davis	95.96	Hancock	101.38	Clinch	114.13
Mcintosh	96.00	Crisp	101.96	Crawford	114.38
Jefferson	96.04	Dodge	102.54	Lamar	115.17
Pulaski	96.79	Dawson	103.50	Terrell	115.29
Catoosa	97.04	Mitchell	103.58	Macon	120.46
Treutlen	97.29	Calhoun	104.21	Dooly	123.75
Quitman	97.54	Union	106.96	Cook	128.50
Telfair	97.71	Glascock	107.38	Rabun	137.96

APPENDIX F: COMPUTERIZED CRIMINAL HISTORY DATA (FURNISHING, PURCHASING, AND POSSESSION OF ALCOHOLIC BEVERAGES BY PERSONS BELOW LEGAL AGE,) RANKED BY COUNTY

County	Total Number of Arrests	County	Total Number of Arrests	County	Total Number of Arrests
Cobb	1210	McIntosh	53	Oglethorpe	23
Clarke	1155	Turner	52	Clayton	23
Bulloch	637	Habersham	51	Long	22
Gwinnett	578	Richmond	51	Jasper	21
Fulton	388	Effingham	50	Stephens	20
Lowndes	314	Laurens	47	Meriwether	20
Baldwin	308	Rabun	47	Atkinson	19
Cherokee	259	Seminole	42	Appling	19
Chatham	237	Chattooga	41	Banks	18
Forsyth	230	Harris	41	Toombs	18
Whitfield	223	Coffee	40	Franklin	17
Hall	208	White	39	Green	17
Floyd	178	Pickens	39	Jeff Davis	17
Tift	156	Ware	37	Charlton	17
Walton	144	Brooks	37	Emanuel	16
Barrow	131	Dawson	37	Oconee	16
Paulding	129	Towns	37	Sumter	16
Dekalb	126	Elbert	37	Terrell	16
Jackson	122	Haralson	36	Bleckley	15
Fayette	120	Union	36	Grady	15
Lumpkin	116	Polk	35	Morgan	15
Houston	110	Colquitt	34	Jones	15
Henry	109	Fannin	33	Butts	14
Gordon	108	Montgomery	32	Pike	13
Catoosa	98	Lamar	31	Cook	13
Walker	97	Dade	30	Rockdale	13
Bartow	95	Wayne	30	Worth	13
Doughtery	85	Gilmer	29	Dooly	12
Camden	81	Pierce	29	Peach	12
Spalding	76	Bryan	28	Heard	12
Glynn	75	Dodge	27	Screven	11
Murray	75	Monroe	27	Taylor	11
Douglas	70	Lee	27	Treutlen	11
Coweta	68	Crisp	26	Hart	10
Muscogee	68	Berrien	26	Calhoun	10
Newton	62	Columbia	26	Telfair	9
Carroll	60	Upson	25	Bibb	9
Thomas	58	Madison	24	Lanier	9
Liberty	56	Troup	24	Bacon	9

County	Total Number of Arrests
Wilkes	8
Early	8
Ben Hill	7
McDuffie	7
Decatur	6
Putnam	6
Brantley	6
Crawford	6
Johnson	6
Wilkinson	5
Mitchell	5
Clay	5
Chattahoochee	5
Pulaski	5
Twiggs	4
Tattnall	4
Washington	4
Echols	2
Quitman	2
Clinch	2
Jenkins	2
Candler	2
Hancock	2
Wheeler	2
Baker	1
Macon	1
Marion	1
Stewart	1
Talbot	1
Taliaferro	1
Burke	1
Jefferson	1
Miller	1
Warren	1
Webster	1
Evans	0
Glascock	0
Irwin	0
Lincoln	0

County	Total Number of Arrests
Randolph	0
Schley	0
Wilcox	0

Introduction: First of all, thank you for taking the time to speak with me today. As you know**,** I am working with EMSTAR Research, which is contracted with the Office of Behavioral Health Prevention in the Georgia Department of Behavioral Health and Developmental Disabilities to conduct a prescription drug misuse/abuse needs assessment for Georgia. This assessment is the first phase of a five-year SAMHSA grant. The information you share will help us better understand the accessibility and use of the Georgia Prescription Drug Monitoring Program, and recommend suggestions for improvement. There are no right or wrong answers and no one will suffer any consequences as a result of the information they provide. Please be as honest as you can. The information we gather will be summarized and you will not be personally identified.

Do you have any questions before we get started?

1. First, of all, can you tell what where you work and what your job is?

2. Thank you. Now, I'd like to speak with you about how prescriptions are dispensed at your pharmacy. Is this information you enter about a prescription done by you personally or is that done by a central office or a technician (" delegate")?
   1) *Possible Probes:*
      a) Does the staff member check photo ID when filling new control substance prescriptions?
         If yes, is the person driver's license number or other document ID checked on the prescription record?
      b) Does the staff member check the patient profile at the time of drop off?
      c) Does the staff member review the PDMP at the time of drop off?

Follow-up questions:

- After you dispense a prescription, how long does it usually take for the information to be accessible in the PDMP?
- How would you improve the way dispensed prescriptions are entered into the PDMP?
- Do you typically run a patient inquiry in the PDMP before dispensing a prescription? (**select column sequence below ↓**).

Yes	No

Yes	No
• On a scale of one to five, with one being never and five being every time you dispense, how often do you run a patient inquiry in the PDMP before dispensing? • Under what circumstances do you run a patient inquiry in the PDMP?	• Can you tell me why not?
• What do you typically do when you spot a problem prescription?	• What would make the PDMP more useful to you?
• On a one to five scale, with 5 being very easy, how easy is it to *access* the PDMP before you dispense a prescription? • On a one to five scale, with 5 being very easy, how easy is it to *navigate* the PDMP before you dispense a prescription? • How would you improve access to and navigation in the PDMP?	• What would it take to prompt you to use the PDMP?
• On a one to five scale, with 5 being very useful, ***how useful is the specific information*** provided in the PDMP to identify problem prescriptions? • What specific data elements are most useful? How so? • What specific data elements are least useful? How so? What could be done to make them more useful? • How else would you improve the specific information in the PDMP?	• What changes would you suggest to improve the PDMP?

Next, I have a few questions about changes made recently to the PDMP.

• Are you aware of changes made last summer to Georgia's PDMP law? **select column sequence below ↓).**

Yes	No
What is your **overall** impression of the effectiveness of these changes? How so?	
Now I would like to ask you questions about your opinions about specific changes to the PDMP.	

	Yes		No
Were you aware of the change to….	On a 1 to 5 scale, with 5 being very effective, how effective has this change been?	What could be done to make it more effective?	On a 1 to 5 scale, with 5 being very effective, how effective do you think this change **could** be? What *could be done* to make it more effective?
1. Allowing licensed staff, versus doctors and pharmacists themselves, to access the PDMP? **Yes/No**	1, 2, 3, 4, 5	What could be done to make it more effective?	
2. Keeping data for two years instead of one? **Yes/No**	1, 2, 3, 4, 5	What could be done to make it more effective?	
3. Allowing notification of law enforcement officers? **Yes/No**	1, 2, 3, 4, 5	What could be done to make it more effective?	
4. Allowing sharing of PDMP data across state lines? **Yes/No**	1, 2, 3, 4, 5	What could be done to make it more effective?	

	Yes		No
5. Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse? **Yes/No**	1, 2, 3, 4, 5	What could be done to make it more effective?	
6. Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data in order to let Georgia citizens know more about the current epidemic? **Yes/No**	1, 2, 3, 4, 5	What could be done to make it more effective?	

There were also changes made to Georgia's PDMP law in the legislative session that ended recently. On a one to five scale, with 5 being very useful, how effective do you think this change could be**? [For each, also ask:]** What could be done to make it more effective?

- Making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV or V drug.
- Requiring the Department of Public Health to randomly test the PDMP "to

determine if it is accessible and operational 99.5 percent of the time."
  - Requiring dispensers to submit prescription information to the PDMP within 24 hours (formerly was 10 days.)

- What else would you recommend to make the PDMP more user-friendly, useful and effective?

Finally, I have a few questions about how PDMPs are administered in other states and possibilities for Georgia. Please give me your opinion about each of these:

- Make running a patient inquiry in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV or V drug.
  - What do you like about this idea?
  - What do you dislike about this idea?
  - Would you support legislation to make it mandatory? Why or why not?

- Make running a patient inquiry in the PDMP mandatory for dispensers before they fill a prescription for a Schedule II, III, IV or V drug.
  - What do you like about this idea?
  - What do you dislike about this idea?
  - Would you support legislation to make it mandatory? Why or why not?

- Add Naloxone/NARCAN, Evzio use by first responders and other opioid overdose information to the PDMP?
  a. What do you like about this idea?
  b. What do you dislike about this idea?
  c. Would you support adding these data to the PDMP database? Why or why not?

- Add opioid related law violations to the PDMP?
  d. What do you like about this idea?
  e. What do you dislike about this idea?
  f. Would you support adding these data to the PDMP database? Why or why not?

- Add patient/prescriber pact **[explain if necessary]** information to the PDMP?
  g. What do you like about this idea?
  h. What do you dislike about this idea?
  i. Would you support adding these data to the PDMP database? Why or why not?

- Add information about patients who acquire drugs in risky or dangerous ways to the PDMP? **[For example, recent positive drug screen for marijuana or cocaine, trying to fill new Rx before old one is completed.]**
    - j. What do you like about this idea?
    - k. What do you dislike about this idea?
    - l. Would you support adding these data to the PDMP database? Why or why not?
    - m. What other "risk factors" have you noticed?

- Allow specially certified law enforcement officers to access the PDMP database without a warrant.
    - n. What do you like about this idea?
    - o. What do you dislike about this idea?
    - p. Would you support this allowance for certified law enforcement officers? Why or why not?

- Do you ever fill scripts for these types of drugs for veterinarians? Yes/No. If yes, do you check the PDMP for these scripts?

We are almost at the end of the survey. The following questions are some demographics we need to collect from all our participants.
    - What is your gender?
    - What is the Zip code of the location where you are practicing?

For professionals:
    - physician's specialty (pain, surgery, OB/GYN, etc.)
    - practice setting (pharmacy, hospital, etc.)
    - number of years licensed

- What other suggestions or comments do you have before we close the interview?

Thanks for your time and thoughtfulness.

APPENDIX H. PRESCRIBER INTERVIEW SCRIPT: PHYSICIANS

An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

Introduction: First of all, thank you for taking the time to speak with me today. As you know, I am working with EMSTAR Research, which is contracted with the Office of Behavioral Health Prevention in the Georgia Department of Behavioral Health and Developmental Disabilities to conduct a prescription drug misuse/abuse needs assessment for Georgia. This assessment is the first phase of a five-year SAMHSA grant. The information you share will help us better understand the accessibility and use of the Georgia Prescription Drug Monitoring Program, and recommend suggestions for improvement. There are <u>no right or wrong answers</u> and no one will suffer any consequences as a result of the information they provide. Please be as honest as you can. The information we gather will be summarized and you will not be personally identified.

How frequently do you prescribe opioid medication?
- *If never*, are you aware of colleagues that do prescribe opioids?
- How frequently do you dispense opioid medication?
- Have you ever heard about the Georgia Prescription Drug Monitoring Program (PDMP)?
    - **If no – Would you like to know more about it? Then continue interview.**
    - **If yes, continue on page 2.**

Here is a short description of the PDMP and list the new changes.

The purpose of the PDMP is to assist in the reduction of the abuse of controlled substances; to improve and encourage a better quality of healthcare by promoting the proper use of medications to treat pain and terminal illness; and to reduce duplicative prescribing and overprescribing of controlled substances.

All Georgia licensed Dispensers (pharmacies and dispensing prescribers) are required to submit information for dispensed Schedule II through V controlled substance prescriptions to the PMPAware database on a weekly basis.

All Healthcare professionals and their assigned delegate have access to the system (we do not have to give the exhaustive list, just a few):

An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia

- *Physician (MD, DO)*
- *Dentist*
- *Nurse Practitioner/Clinical Nurse Specialist*
- *Midwife with Prescriptive Authority*
- *Physician Assistant*
- *Podiatric Physician (DPM)*
- *Optometrist*
- *Pharmacist*
- *Pharmacy Technic*
- *Veterinarian*
- *Medical Intern with Prescriptive Authority*
- *Medical Resident with Prescriptive Authority*
- *IHS Prescriber*
- *IHS Dispenser*
- *Military Prescriber*
- *VA Prescriber*
- *VA Dispenser*
- *Prescriber Delegate - Unlicensed*
- *Prescriber Delegate - Licensed*
- *Prescriber without DEA*

If you would like to register: https://gdna.georgia.gov/georgia-prescription-drug-monitoring-program

- Tell me how you would use the Georgia PDMP?
  - When writing a prescription
  - When filling a prescription (*just in case there are some that fill scripts in house*)
  - When working with a patient/individual (checking status - particularly for law enforcement)
- How much time do you think it would take for you to check the PDMP at each relevant appointment?
- What are potential barriers to checking and/or entering data into the GA PDMP?
- How many staff members do you have that could enter data in the PDMP?
- How much time could you set aside to receive training?
- In what ways would you and your staff like to receive training? What training style works best for you team and organization?
  - Which staff members would be able to receive training?

END HERE.

IF YES, BEGIN HERE

First, I have a few questions about your use of Georgia's PDMP:

- Do you or a technician in your office ever run patient inquiries in the PDMP before dispensing a prescription?

Yes	No
• On a scale of one to five, with one being never and five being every time you prescribe, how often do you personally run patient inquiries in the PDMP before prescribing?	• What would make the PDMP more useful to you?
• In your own words, for what reasons do you use the PDMP before prescribing? • What do you typically do when you spot a problem prescription?	• What would it take to prompt you to use the PDMP?
• On a one to five scale, with 5 being very easy, how easy is it to ***access and navigate*** the PDMP before you prescribe? • How would you improve access to and navigation in the PDMP?	• What suggestions do you have for improving the PDMP?
• On a one to five scale, with 5 being very useful, ***how useful is the specific information*** provided in the PDMP to identify problem prescriptions? • What specific data elements are most useful? How so? • What specific data elements are least useful? How so? What could be done to make them more useful? • How else would you improve the specific information in the PDMP?	

Next, I have a few questions about changes made recently to the PDMP.

- Are you aware of changes made last summer to Georgia's PDMP law?

[IF YES, ask:]

- What is your overall impression of the effectiveness of these changes? How so? **[For each of the following items ask:]**
- Were you aware of this change to the law? **[IF Yes ask:]**
- On a one to five scale, with 5 being very useful, *how effective* has this change been? **[For each, also ask:]** What could be done to make it more effective?

[IF No, ask:]

- On a one to five scale, with 5 being very useful, *how effective* do you think this change could be? **[For each, also ask:]** What could be done to make it more effective?

  - Allowing licensed staff, versus doctors and pharmacists themselves, to access the PDMP?
  - Keeping data for two years instead of one?
  - Allowing notification of law enforcement officers?
  - Allowing sharing of PDMP data across state lines?
  - Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse?
  - Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data in order to let Georgia citizens know more about the current epidemic?

- There were also changes made to Georgia's PDMP law in the legislative session that ended recently. On a one to five scale, with 5 being very useful, how effective do you think this change could be**? [For each, also ask:]** What could be done to make it more effective?

  - Making patient inquiries in the PDMP mandatory for prescribers before they write a prescription for a Schedule II, III, IV or V drug.
  - Requiring the Department of Public Health to randomly test the PDMP "to determine if it is accessible and operational 99.5 percent of the time."
  - Requiring dispensers to submit prescription information to the PDMP within 24 hours (formerly was 10 days.)

- What else would you recommend to make the PDMP more user-friendly, useful and effective?

Finally, I have a few questions about possibilities for Georgia based on how PDMPs are administered in other states. Please give me your opinion about each of these:

On a one to five scale, with 5 being strongly support, *how supportive* are you to the following changes?

- Make running patient inquiries in the PDMP mandatory for dispensers before they fill a prescription for a Schedule II, III, IV or V drug. **(Regardless of the scale response, still ask the following questions.)**
    - What do you like about this idea?
    - What do you dislike about this idea?
    - Would you support legislation to make it mandatory? Why or why not?

- Add Naloxone/NARCAN, Evzio use and other opioid overdose information to the PDMP? **(Regardless of the scale response, still ask the following questions.)**
    a. What do you like about this idea?
    b. What do you dislike about this idea?

- Add opioid related law violations to the PDMP? **(Regardless of the scale response, still ask the following questions.)**
    a. What do you like about this idea?
    b. What do you dislike about this idea?

- Add patient/prescriber pact **[explain if necessary]** information to the PDMP? **(Regardless of the scale response, still ask the following questions.)**
    a. What do you like about this idea?
    b. What do you dislike about this idea?

- Add information about patients who acquire drugs in risky or dangerous ways to the PDMP? **[For example, recent positive drug screen for marijuana or cocaine, trying to fill new Rx before old one is completed.] (Regardless of the scale response, still ask the following questions.)**
    a. What do you like about this idea?
    b. What do you dislike about this idea?
    c. What other "risk factors" have you noticed?

- Allow specially certified law enforcement officers to access the PDMP database

without a warrant. **(Regardless of the scale response, still ask the following questions.)**

    a. What do you like about this idea?

    b. What do you dislike about this idea?

Final Questions

- Can you please tell me your specialty area? (pain, surgery, OB/GYN, etc.)
- And practice setting? (pharmacy, hospital, etc.)
- Approximate number of years you have been licensed to practice?
- What other suggestions or comments do you have before we close the interview?

Thanks for your time and thoughtfulness.

APPENDIX I. PRESCRIBER INTERVIEW SCRIPT: ADVANCED PRACTICE REGISTERED NURSES, PHYSICIAN ASSISTANTS, DENTISTS, VETERINARIANS

Introduction: First of all, thank you for taking the time to speak with me today. As you know, I am working with EMSTAR Research, which is contracted with the Office of Behavioral Health Prevention in the Georgia Department of Behavioral Health and Developmental Disabilities to conduct a prescription drug misuse/abuse needs assessment for Georgia. This assessment is the first phase of a five-year SAMHSA grant. The information you share will help us better understand the accessibility and use of the Georgia Prescription Drug Monitoring Program, and recommend suggestions for improvement. There are no right or wrong answers and no one will suffer any consequences as a result of the information they provide. Please be as honest as you can. The information we gather will be summarized and you will not be personally identified.

Do you have any questions before we get started?

1. First, of all, can you tell us where you work and what your job is?

2. Thank you. Now I'd like to ask you about whether you prescribe and/or dispense controlled substances.

- How frequently do you prescribe controlled substances?
- If never, are you aware of colleagues that do prescribe controlled substances?
- How frequently do you dispense controlled substances?
- Have you ever heard about the Georgia Prescription Drug Monitoring Program (PDMP)?
    - **If the prescribe and/or dispense AND have heard of the PDMP, continue on page 3**
    - **If no – continue below**

Here is a short description of the PDMP and list the new changes.

The purpose of the PDMP is to assist in the reduction of the abuse of controlled substances; to improve and encourage a better quality of healthcare by promoting the proper use of medications to treat pain and terminal illness; and to reduce duplicative prescribing and overprescribing of controlled substances.

All Georgia licensed Dispensers (pharmacies and dispensing prescribers) are required to submit information for dispensed Schedule II through V controlled substance prescriptions to the PMPAware database on a weekly basis.

All Healthcare professionals and their assigned delegate have access to the system (we do not have to give the exhaustive list, just a few):
- *Physician (MD, DO)*
- *Dentist*
- *Nurse Practitioner/Clinical Nurse Specialist*
- *Midwife with Prescriptive Authority*
- *Physician Assistant*
- *Podiatric Physician (DPM)*
- *Optometrist*
- *Pharmacist*
- *Pharmacy Technician*
- *Veterinarian*
- *Medical Intern with Prescriptive Authority*
- *Medical Resident with Prescriptive Authority*
- *IHS Prescriber*
- *IHS Dispenser*
- *Military Prescriber*
- *VA Prescriber*
- *VA Dispenser*
- *Prescriber Delegate - Unlicensed*
- *Prescriber Delegate - Licensed*
- *Prescriber without DEA*

If you would like to register: https://gdna.georgia.gov/georgia-prescription-drug-monitoring-program

- Tell me how you would use the Georgia PDMP?
  - When writing a prescription
  - When filling a prescription (*just in case there are some that fill scripts in house*)
  - When working with a patient/individual (checking status - particularly for law enforcement)

If they do not prescribe or dispense explain that you are asking it in the hypothetical.
- How much time do you think it would take for you to check the PDMP at each relevant appointment?
- What are potential barriers to checking and/or entering data into the GA PDMP?
- How many staff members do you have that could enter data in the PDMP?

- How much time could you set aside to receive training?
- In what ways would you and your staff like to receive training? What training style works best for you team and organization?
  - Which staff members would be able to receive training?

END HERE.

IF YES, BEGIN HERE

First, I have a few questions about your use of Georgia's PDMP:

- Do you or anyone in your office ever run patient inquiries in the PDMP before dispensing a prescription?

Yes	No
● On a scale of one to five, with one being never and five being every time you prescribe, how often do you personally run patient inquiries in the PDMP before prescribing?	● What would make the PDMP more useful to you?
● In your own words, for what reasons do you use the PDMP before prescribing? ● What do you typically do when you spot a problem prescription?	● What would it take to prompt you to use the PDMP?
● On a one to five scale, with 5 being very easy, how easy is it to **access and navigate** the PDMP before you prescribe? ● How would you improve access to and navigation in the PDMP?	● What suggestions do you have for improving the PDMP?
● On a one to five scale, with 5 being very useful, **how useful is the specific information** provided in the PDMP to identify problem prescriptions? ● What specific data elements are most useful? How so? ● What specific data elements are least useful? How so? What could be done to make them more useful? ● How else would you improve the specific information in the PDMP?	

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Next, I have a few questions about changes made recently to the PDMP.

- Are you aware of changes made last summer to Georgia's PDMP law? **select column sequence below ↓).**
  [Skip this question if the prior question was answered "no."]
- What is your overall impression of the effectiveness of these changes? How so?
  [For each of the following items ask:]
- Were you aware of this change to the law? **[IF Yes ask:]**
- On a one to five scale, with 5 being very useful, *how effective* has this change been? **[For each, also ask:]** What could be done to make it more effective?

[IF No, ask:]
- On a one to five scale, with 5 being very useful, *how effective* has this change been? **[For each, also ask:]** What could be done to make it more effective?
  - Allowing licensed staff, versus doctors and pharmacists themselves, to access the PDMP?
  - Keeping data for two years instead of one?
  - Allowing notification of law enforcement officers?
  - Allowing sharing of PDMP data across state lines?
  - Allowing qualified researchers to access de-identified PDMP data, in order to investigate patterns of how drugs are being used, by whom, and how to reduce or prevent drug abuse?
  - Having the GA Drugs and Narcotics Agency issue reports of aggregate (de-identified) PDMP data in order to let Georgia citizens know more about the current epidemic?

There were also changes made to Georgia's PDMP law in the legislative session that ended last week. On a one to five scale, with 5 being very useful, how effective do you think this change could be? [For each, also ask:] What could be done to make it more effective?
  a. Making registration mandatory for prescribers who have a DEA registration number.
  b. Making patient inquiries in the PDMP mandatory for **prescribers** before they write a prescription for a controlled substance or benzodiazepines **the first time the prescriber issues such a prescription and thereafter at least once every 90 days.**
  c. Requiring the Department of Public Health to randomly test the PDMP "to determine if it is accessible and operational 99.5 percent of the time."
  d. Requiring dispensers to submit prescription information to the PDMP within

24 hours (formerly was 10 days.)
- What else would you recommend to make the PDMP more user-friendly, useful and effective?

Finally, I have a few questions about possibilities for Georgia based on how PDMPs are administered in other states. Please give me your opinion about each of these:

On a one to five scale, with 5 being strongly support, ***how supportive*** are you to the following changes?

- Make running patient inquiries in the PDMP mandatory for dispensers before they fill a prescription for a Schedule II, III, IV or V drug. **(Regardless of the scale response, still ask the following questions.)**
  a. What do you like about this idea?
  b. What do you dislike about this idea?
  c. Would you support legislation to make it mandatory? Why or why not?

- Add Naloxone/NARCAN, Evzio use and other opioid overdose information to the PDMP? **(Regardless of the scale response, still ask the following questions.)**
  a. What do you like about this idea?
  b. What do you dislike about this idea?
  c. Would you support adding these data to the PDMP database? Why or why not?

- Add opioid related law violations to the PDMP? **(Regardless of the scale response, still ask the following questions.)**
  a. What do you like about this idea?
  b. What do you dislike about this idea?
  c. Would you support adding these data to the PDMP database? Why or why not?

- Add patient/prescriber pact **[explain if necessary]** information to the PDMP? **(Regardless of the scale response, still ask the following questions.)**
  a. What do you like about this idea?
  b. What do you dislike about this idea?
  c. Would you support adding these data to the PDMP database? Why or why not?

- Add information about patients who acquire drugs in risky or dangerous ways to

the PDMP? **[For example, recent positive drug screen for marijuana or cocaine, trying to fill new Rx before old one is completed.] (Regardless of the scale response, still ask the following questions.)**

    a. What do you like about this idea?
    b. What do you dislike about this idea?
    c. Would you support adding these data to the PDMP database? Why or why not?
    d. What other "risk factors" have you noticed?

- Allow specially certified law enforcement officers to access the PDMP database without a warrant. **(Regardless of the scale response, still ask the following questions.)**

    a. What do you like about this idea?
    b. What do you dislike about this idea?
    c. Would you support adding these data to the PDMP database? Why or why not?

Final Questions

We are almost at the end of the survey. I have a few demographic questions that I would like to ask.
These questions are optional.
- What is your gender?
- What is the Zip code of the location where you are practicing?

For professionals:
- Can you please tell me your specialty area? (pain, surgery, OB/GYN, etc.)
- And practice setting? (pharmacy, hospital, etc.)
- Approximate number of years you have been licensed to practice?
- What other suggestions or comments do you have before we close the interview?

Thanks for your time and thoughtfulness.

An Assessment of Prescription Drug Abuse, Underage Drinking and the Prescription Drug Monitoring Program in Georgia