

PRESCRIPTION DRUG MONITORING PROGRAM

GEORGIA REPORT, 2018

Georgia Department of Public Health (DPH) • Epidemiology Section
dph.georgia.gov/epidemiology



The Prescription Drug Monitoring Program (PDMP)

The purpose of this report is to describe opioid prescribing patterns in Georgia during 2018. Prescription data from the Georgia Prescription Drug Monitoring Program (PDMP) were analyzed by the Georgia Department of Public Health (DPH) Epidemiology Program Drug Surveillance Unit. Certain prescribing practices are considered high-risk, and may predispose patients to opioid use disorder and overdose, hence contributing to the growing opioid epidemic (for more information about the opioid epidemic in Georgia, see the Georgia opioid overdose surveillance reports available at <https://dph.georgia.gov/drug-surveillance-unit>). These prescribing practices are presented as PDMP indicators in this report; detailed analyses of the PDMP data were conducted to measure the total number of opioid prescriptions, number of patients receiving opioids, drug type, days dispensed, and other indicators of prescribing such as overlapping opioid or opioid and benzodiazepine prescriptions.

In 2016, the Centers for Disease Control and Prevention (CDC) released opioid prescribing guidelines for healthcare providers for chronic diseases (<https://www.cdc.gov/drugoverdose/prescribing/guideline.html>). Appropriate prescribing, and adhering to these CDC guidelines to prevent problematic prescribing, may help improve patient care and safety, and decrease the risk of opioid use disorder and overdose. Data in this report will be used to educate stakeholders and inform prevention efforts across the state.

What is the PDMP?

The PDMP is an electronic database used to collect, monitor, and analyze prescribing and dispensing data about controlled substances (such as opioids, benzodiazepines and stimulants) in Georgia. The PDMP collects details of every Schedule II – V prescription drug order dispensed in Georgia. Registered healthcare practitioners, pharmacists, and regulatory boards report these data into the PDMP through an online portal. A person authorized to access the PDMP can look up a patient and their prescription history from the previous two years. On July 1, 2017, the Georgia Drug and Narcotics Agency, who had been managing the PDMP since its establishment in 2013, transferred administration of the program to DPH.

The PDMP can help prescribers and dispensers of controlled substances to identify patients who are at risk of addiction, who “doctor shop,” or who are prescribed dangerous amounts and/or combinations of controlled substances. It can also help law enforcement personnel detect inappropriate prescribing practices. The PDMP does not interfere with appropriate, professional prescribing and dispensing; it is intended only to help eliminate duplicative prescribing, overprescribing and diversion of controlled

substances. PDMP data are also used to support Georgia's overarching statewide opioid response strategic plan, which spans across myriad agencies and activities, including public health, education, research, enforcement of appropriate prescribing and dispensing, drug abuse prevention, and treatment and recovery.

PDMP Requirements

Since July 1, 2017, dispensers have been required by Georgia law (https://dph.georgia.gov/sites/dph.georgia.gov/files/HB249_law.pdf) to enter prescription information for any Schedule II-V controlled substance within 24 hours of dispensing. Prescribers were required to register into the PDMP system by Jan. 1, 2018. Beginning July 1, 2018, prescribers were required to check the PDMP before prescribing schedule II opioids and cocaine derivatives, or benzodiazepines, with some exceptions (<https://dph.georgia.gov/pdmp>). The PDMP is a tool for prescribers to review a patient's prescription history to assist with appropriate and safe prescribing of controlled substances.

Only prescribers and dispensers who practice in Georgia are required to use the PDMP. Prescribers and dispensers are allowed to register two delegates (staff without a DEA number) per shift or rotation to check the PDMP and retrieve patient prescription histories.

PDMP Data Sharing

Georgia law (2017 Georgia House Bill 249) allows DPH to share PDMP prescription information with electronic health record systems, and other States, including law enforcement from other states through subpoenas. Law enforcement agencies may need these data when they are conducting investigations into inappropriate prescribing or dispensing of controlled substances.

For more information:

- About the PDMP: GA PDMP Overview and FAQs
<https://dph.georgia.gov/pdmp>
- County level data and Georgia overdose surveillance reports:
<https://dph.georgia.gov/drug-surveillance-unit>
- Georgia overdose mortality interactive maps and statistics:
<https://oasis.state.ga.us/PageDirect.aspx?referer=MortalityDrugOverdoses>

Georgia PDMP, 2018: Key Findings

Georgia saw improvements in opioid prescribing practices from 2017 to 2018, as evidenced by these PDMP indicators:

- ❖ In 2018, there were 7,487,527 opioid prescriptions dispensed to 2,018,390 patients in Georgia. These prescriptions averaged 18.2 days of opioids dispensed per prescription.
- ❖ From 2017 to 2018, the number of opioid prescriptions statewide decreased by 6%, benzodiazepine prescriptions by 3%, and stimulants increased by 12%.
- ❖ The number of patients receiving opioid prescriptions decreased 10% from 2017 to 2018. The average number of days dispensed per opioid prescription remained steady.
- ❖ In the first quarter of 2017 (Q1), there were 2,093,949 opioid prescriptions dispensed compared to 1,827,400 prescriptions in the last quarter of 2018 (Q4).
- ❖ From 2017 to 2018, the rate of opioid prescriptions dispensed decreased by 12% among persons aged 5-54 years, 7% among those aged 55-64 years, 3% among those aged 65-74 years, 2% among those aged 75-84 years, and 1% among those aged 85+. Opioid prescriptions decreased 7% among both males and females.
- ❖ High opioid dosages are associated with an increased risk of opioid use disorder and overdose; the 2016 CDC opioid prescribing guidelines recommended that daily opioid

dosages should not exceed 90 morphine milligram equivalents (MME). The percent of patients in Georgia who were receiving an average daily dose of ≥ 90 (MME) of opioids decreased by 27% from Q1 2017 to Q4 2018.



- ❖ The use of multiple prescribers and pharmacies can be an indication of drug seeking behavior and opioid use disorder. In Georgia, the number of instances of multiple provider episodes (a patient received prescriptions for opioids from five or more prescribers dispensed at five or more pharmacies within a six-month period) per 100,000 population decreased by 58% from the first half of 2017 to the second half of 2018.
- ❖ Opioid naïve patients (patients with no opioid prescriptions in the previous 60 days) who are prescribed long acting/extended release (LA/ER) opioids may be at higher risk of opioid use disorder. The percent of opioid naïve patients receiving LA/ER refers to the number of opioid naïve patients who were prescribed at least one LA/ER opioid, among all patients with LA/ER opioid prescriptions. The percentage of opioid naïve patients receiving long-acting opioids varies quarter to quarter, but there has been no significant change over time.
- ❖ Percent overlapping opioid prescriptions refers to the number of days that patients had more than one opioid prescription, among all opioid prescription days. Patients with overlapping prescriptions for opioids are at greater risk of opioid use disorder and overdose. The percent of patient days with overlapping opioid prescriptions in Georgia decreased by 5% from Q1 2017 to Q4 2018.
- ❖ Percent overlapping opioid and benzodiazepine prescriptions refers to the number of days that patients

had an opioid and benzodiazepine prescription on the same day, among all opioid prescription days. The simultaneous use of opioid and benzodiazepine prescriptions can increase the risk of prescription drug misuse and overdose. The percent of patient days with overlapping opioid and benzodiazepine prescriptions in Georgia decreased by 12% from Q1 2017 to Q4 2018.

- ❖ Short-Acting hydrocodone, oxycodone and tramadol were the most-prescribed opioids in Georgia during both 2017 and 2018.
- ❖ The number of registered PDMP users increased by 17% from Dec. 21, 2017 to May 29, 2018; legislation requiring prescribers to be registered by the end of 2017 took effect in July 2017.
- ❖ Patient queries by prescribers (or their delegates) and dispensers doubled from 3.1 million queries in 2017 to 6.6 million queries in 2018.



Prescription Drug Monitoring Program Data Indicators

Data Source

All schedule II-V drug prescriptions dispensed and reported to the Georgia Prescription Drug Monitoring Program during 2016–2018

PDMP Indicator Description

Opioid analgesic prescriptions

Opioid analgesic controlled substance prescriptions dispensed and reported to the PDMP. Drugs administered to patients by substance abuse treatment programs are usually excluded from PDMP files and therefore are not captured by this indicator. Additional exclusion criteria include: (1) drugs not typically used in outpatient settings or otherwise not critical for calculating dosages in morphine milligram equivalents (MME), such as cough and cold formulations including elixirs, and combination products containing antitussives, decongestants, antihistamines and expectorants; (2) all buprenorphine products. Rate is calculated per 1,000 population (Georgia residents).

Rate is age-adjusted except when age categories are presented.

County level prescription rates are age adjusted.

Opioid prescription patients

The number of individual patients receiving an opioid analgesic controlled substance prescription that was dispensed and reported to the PDMP. Rate is calculated per 1,000 population (Georgia residents).

Rate is age-adjusted except when age categories are presented.

Days per opioid prescriptions

The average number of days of opioid analgesics supplied per prescription.

Patients receiving avg. daily dose \geq 90 morphine milligram equivalents

% of patients with an average of \geq 90 MME of opioid analgesic drugs prescribed per day.

- Numerator: the number of patients with an average of \geq 90 MME of opioid analgesic drugs prescribed per day
- Denominator: state residents who received an opioid analgesic prescription
- Average MME per day is calculated from total number of MMEs from all-drugs prescribed per day, inclusive of overlapping prescriptions of either the same and/ or differing drugs, divided by the total number of prescription days

Multiple provider episodes for opioids per 100,000 population

The number of patients receiving prescriptions for opioid analgesics from five or more prescribers dispensed at five or more pharmacies (reporting to the PDMP), per 100,000 population.

- Numerator: The number of instances of patients receiving prescriptions for opioid analgesics from five or more prescribers dispensed at five or more pharmacies during a six-month period
- Denominator: 100,000 population (Georgia residents)

Opioid naïve patients receiving long acting opioids

Patients with no opioid prescriptions in the previous 60 days who were prescribed at least one long acting/extended release (LA/ER) opioid, among all patients with LA/ER opioid prescriptions.

- Numerator: opioid naïve patients with at least one LA/ER opioid prescription
- Denominator: all patients with at least one LA/ER prescription

Patient days with overlapping opioid prescription

% of days that patients had more than one prescribed opioid prescription on the same day.

- Numerator: total number of days any patient had more than one opioid prescription
- Denominator: total number of opioid prescription days for state residents in the state PDMP. A prescribed day with overlapping opioid prescriptions (≥ 2) is only counted as one prescribed opioid day

Patient days with overlapping opioid and benzodiazepine prescription

% of days that patients had an opioid and benzodiazepine prescription on the same day.

- Numerator: total number of days any patient had an opioid and benzodiazepine prescription on the same day
- Denominator: total number of opioid prescription days for state residents in the state PDMP. A prescribed day with overlapping opioid prescriptions (≥ 2) is only counted as one prescribed opioid day

Other Definitions or Limitations

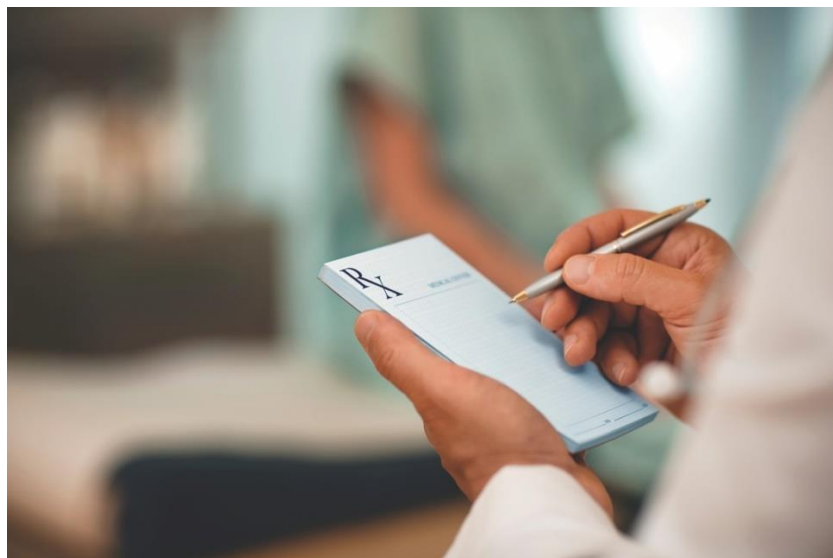
Not all out-of-state pharmacies report to the Georgia PDMP, therefore some prescriptions obtained in another state, or by mail, could be missing from these data.

Some 2018 prescription data were missing sex and age (<2% missing), therefore the race and age data represent only prescriptions for which sex and age were completed.

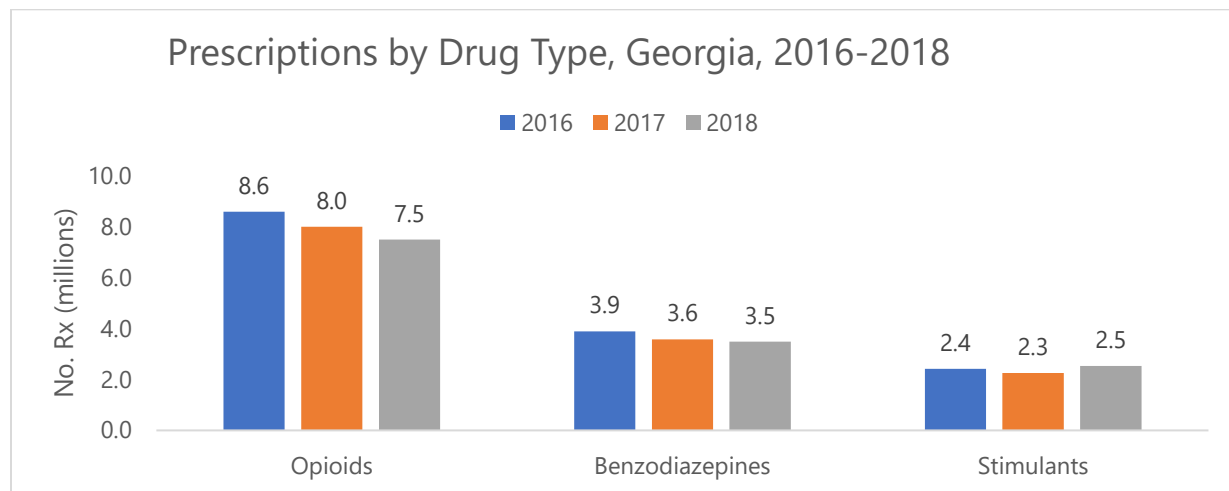
Rate indicates the number events that occurred among Georgia residents per 1,000 population using 2017 census data as the denominator, and all rates are age-adjusted unless age category is presented.

We report on three categories of controlled substances in this report, these categories include:

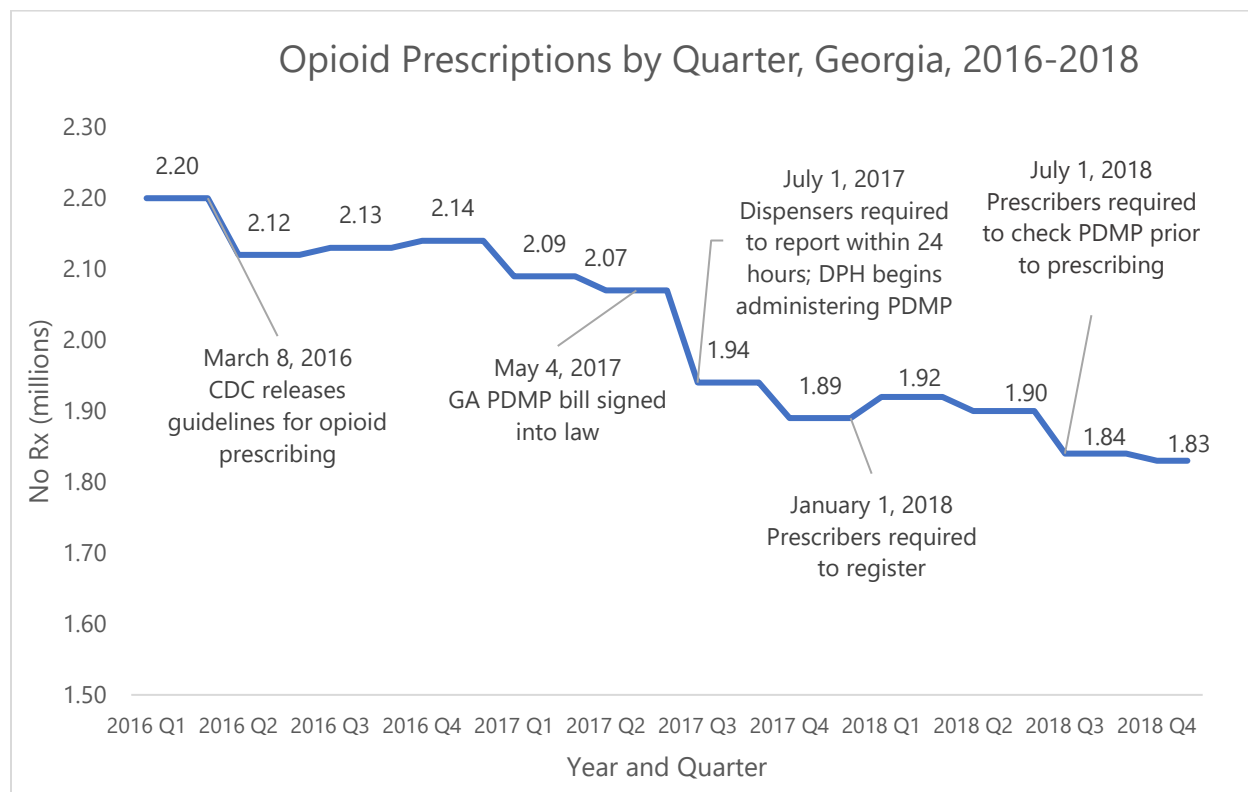
- Opioids: buprenorphine, butorphanol, codeine, dezocine, dihydrocodeine, fentanyl, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, nalbuphine, opiate agonists, oxycodone, oxymorphone, pentazocine, tapentadol, tramadol and other opioids
- Benzodiazepines: alprazolam, chlordiazepoxide, clonazepam, clorazepate, diazepam, estazolam, flurazepam, lorazepam, oxazepam, temazepam, triazolam and other benzodiazepines
- Stimulants: amphetamine, benzphetamine, desoxyephedrine, dexamethylphenidate, dextroamphetamine, lisdexamfetamine, methylphenidate and other stimulants



Prescription Drug Monitoring Program Data Indicators

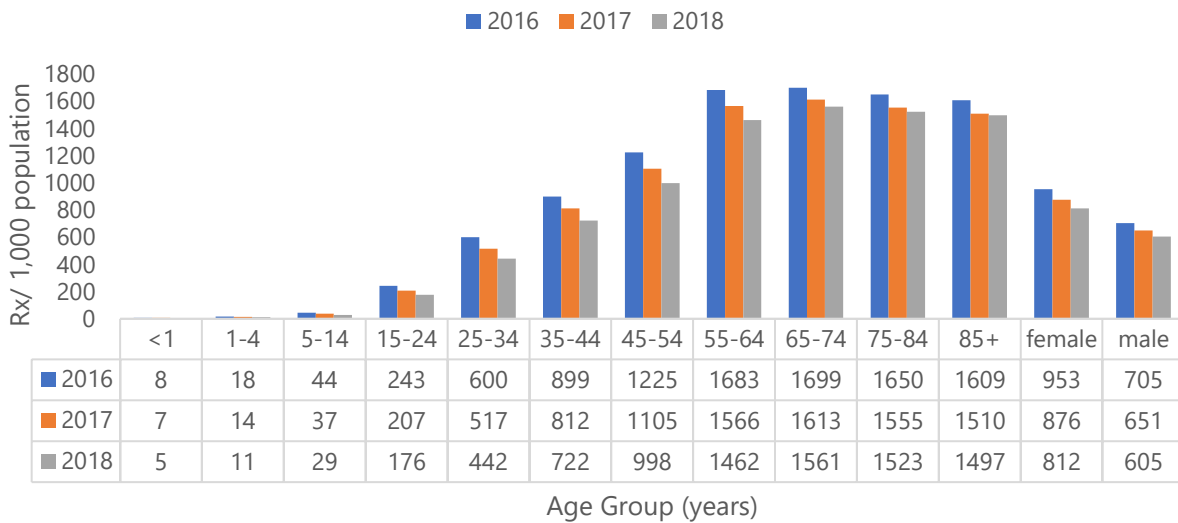


Opioids are the most frequently prescribed controlled substance in Georgia, followed by benzodiazepines. From 2017 to 2018, the number of opioid prescriptions decreased by 6% and benzodiazepine prescriptions by 3%. Stimulant prescriptions increased by 12%.



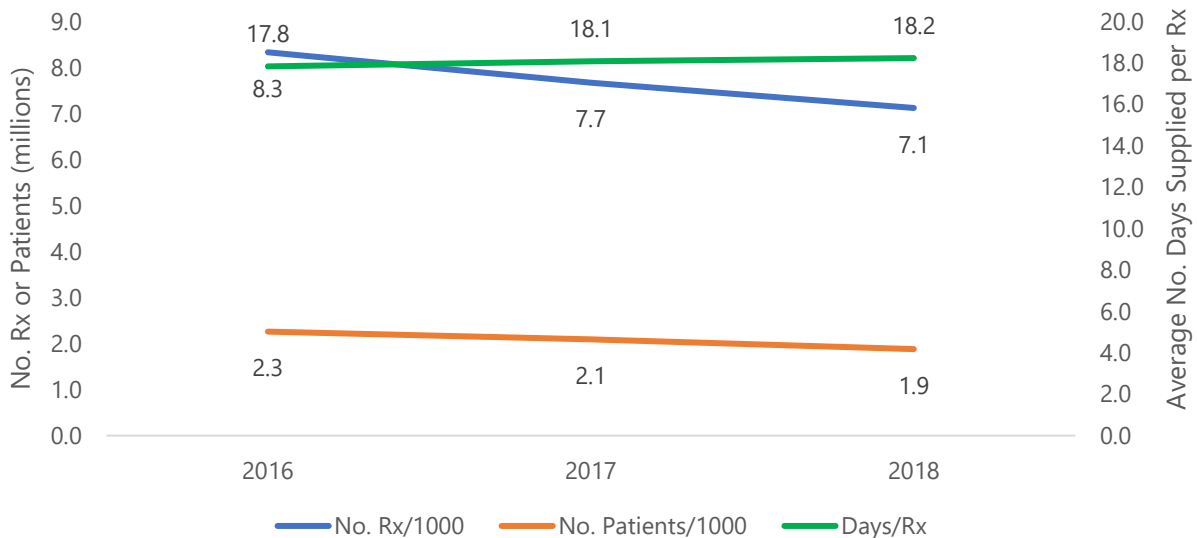
In the first quarter of 2017, there were 2,093,949 opioid prescriptions dispensed compared to 1,827,400 prescriptions in the last quarter of 2018. Several changes were made to the PDMP as a result of Georgia House Bill 249, which was signed into law during the 2017 legislative session, and the CDC also released opioid prescribing guidelines for chronic conditions in 2016.

Opioid Prescription Rates, by Age and Sex, Georgia, 2016-2018



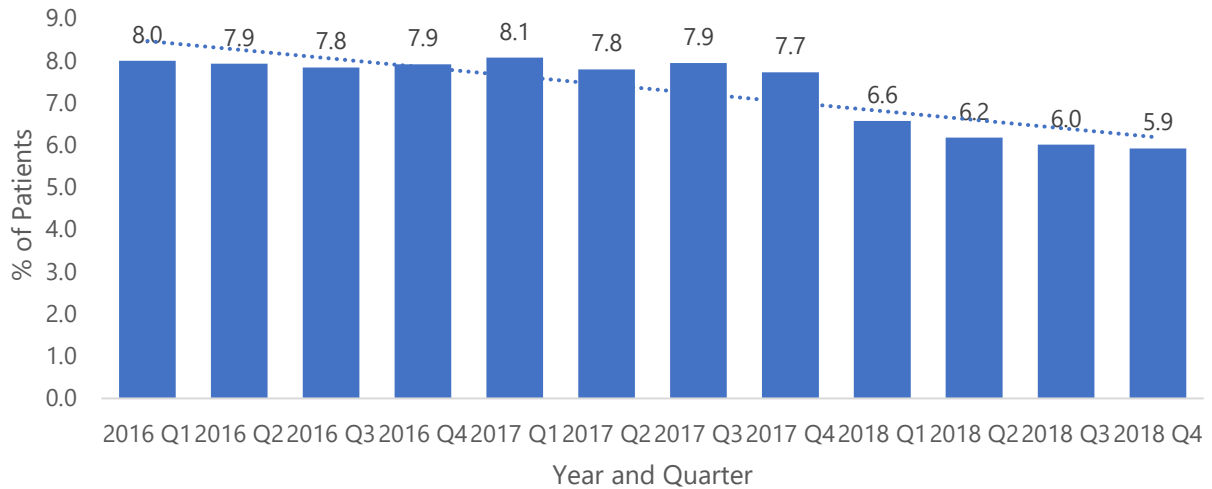
From 2017 to 2018, the rate of opioid prescriptions dispensed in Georgia decreased by 12% among persons aged 5-54 years, 7% among those aged 55-64 years, 3% among those aged 65-74 years, 2% among those aged 75-84 years, and 1% among those aged 85+. Opioid prescriptions decreased by 7% among both males and females.

Opioid Prescriptions, Patients, and Average Days Supplied per Rx, Georgia, 2016-2018



The number of opioid prescriptions and patients receiving opioid prescriptions decreased by 8% and 10%, respectively, from 2017 to 2018. The average number of days dispensed per opioid prescription remained steady.

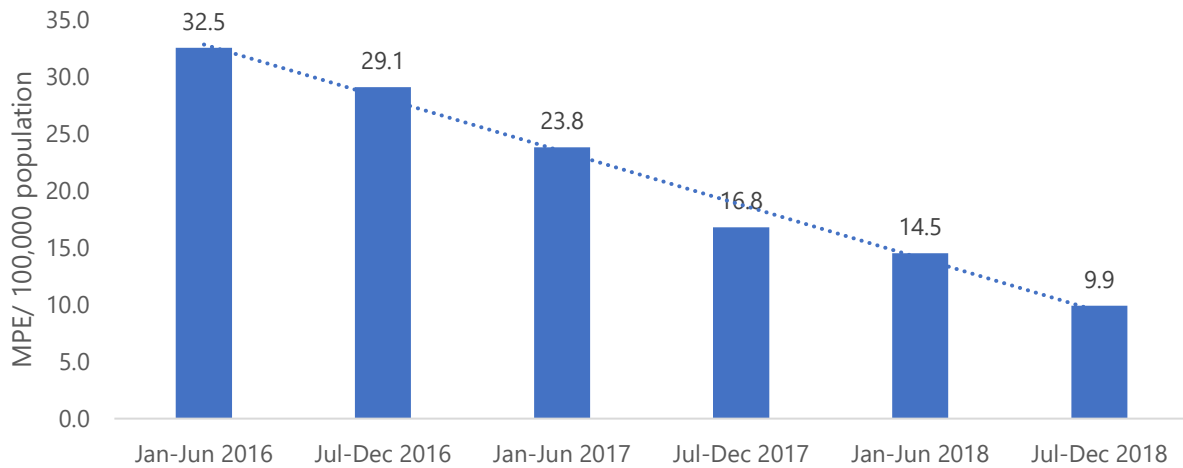
Percent Patients Receiving an Average daily Dose \geq 90 Morphine Miligram Equivalents of Opioids, by Quarter, Georgia, 2016-2018



High opioid dosages are associated with an increased risk of opioid use disorder and overdose. The 2016 CDC opioid prescribing guidelines recommended that daily opioid dosages should not exceed 90 morphine milligram equivalents (MME). The graph above represents the quarterly percent of patients in Georgia who were receiving an average daily dose of \geq 90 (MME) of opioids during 2016-2018. The percent of patients in Georgia who were receiving an average daily dose of \geq 90 (MME) of opioids decreased by 27% from Q1 2017 to Q4 2018.

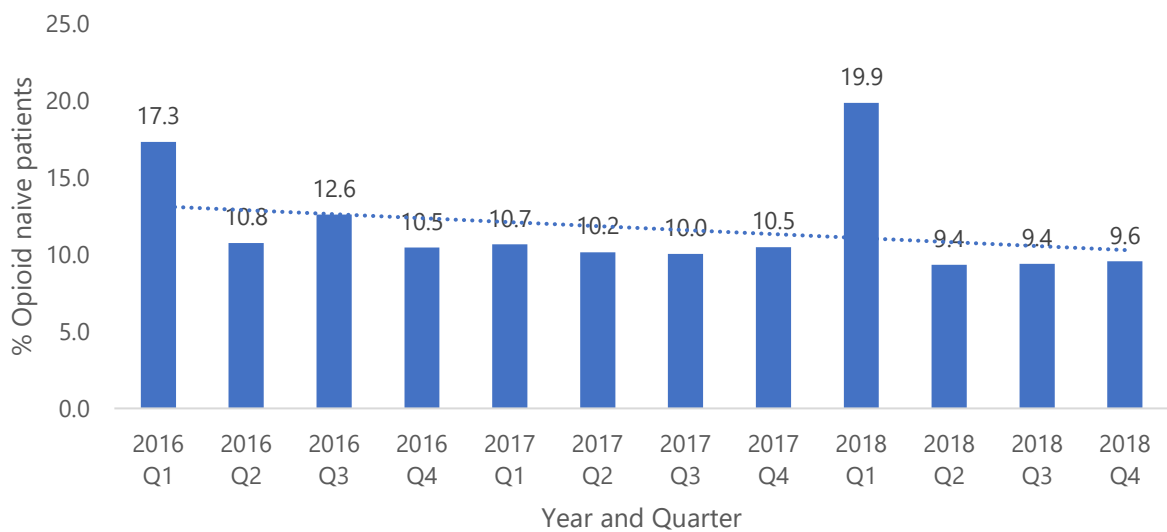


Semi-annual Rate of Multiple Provider Episodes (MPE) for Prescription Opioids, Georgia, 2016-2018

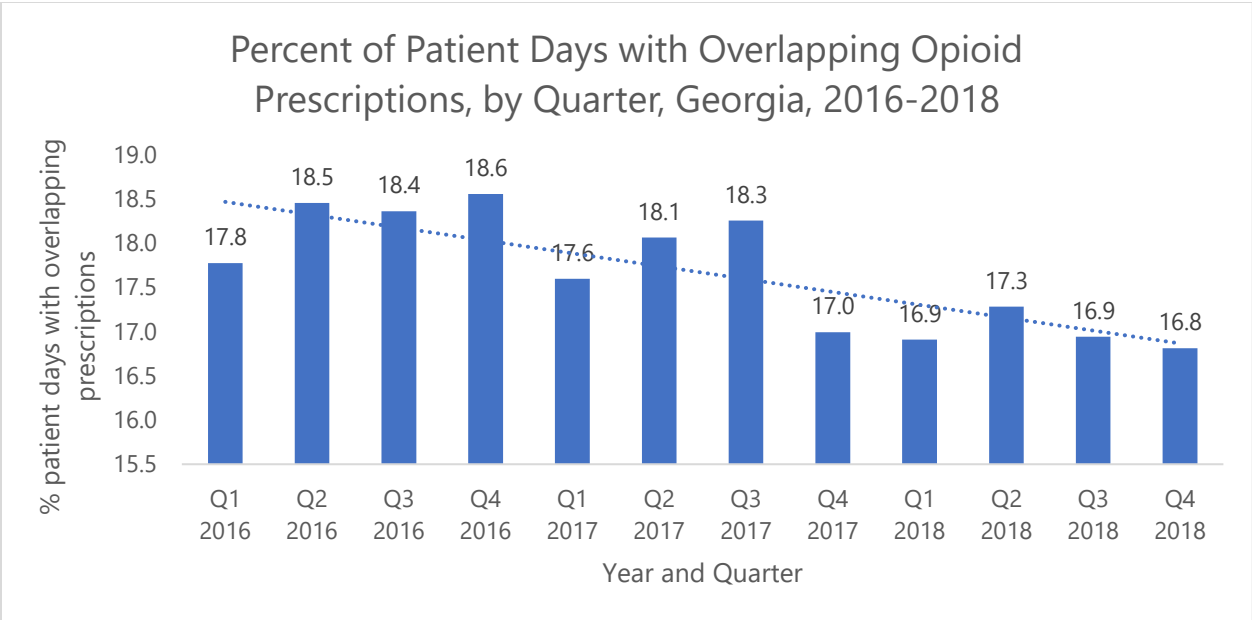


The use of multiple prescribers and pharmacies can be an indication of drug seeking behavior and opioid use disorder. In Georgia, the number of patients who received prescriptions for opioids from five or more prescribers dispensed at five or more pharmacies within a six-month period (per 100,000 population) decreased by 58% from the first half of 2017 to the second half of 2018.

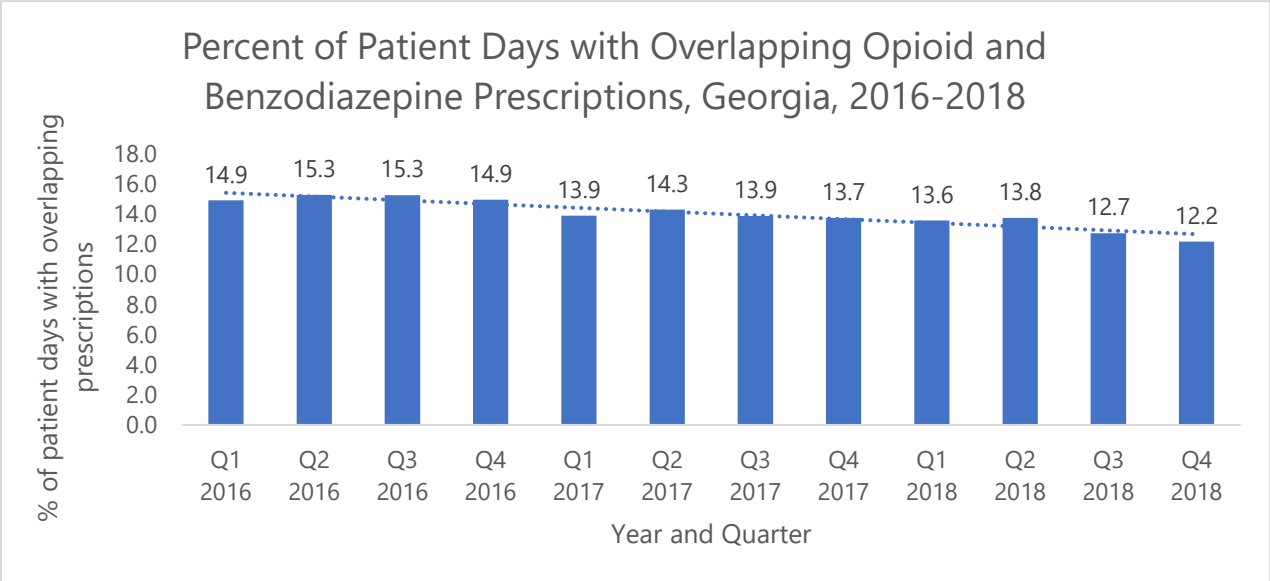
Percent of Opioid Naive Patients Receiving Long-Acting Opioids, Georgia, 2016-2018



Opioid naive patients (patients with no opioid prescriptions in the previous 60 days) who are prescribed long acting/extended release opioids may be at higher risk of opioid use disorder. The percentage of opioid naive patients receiving long-acting opioids varies quarter to quarter, but there has been no significant change over time.

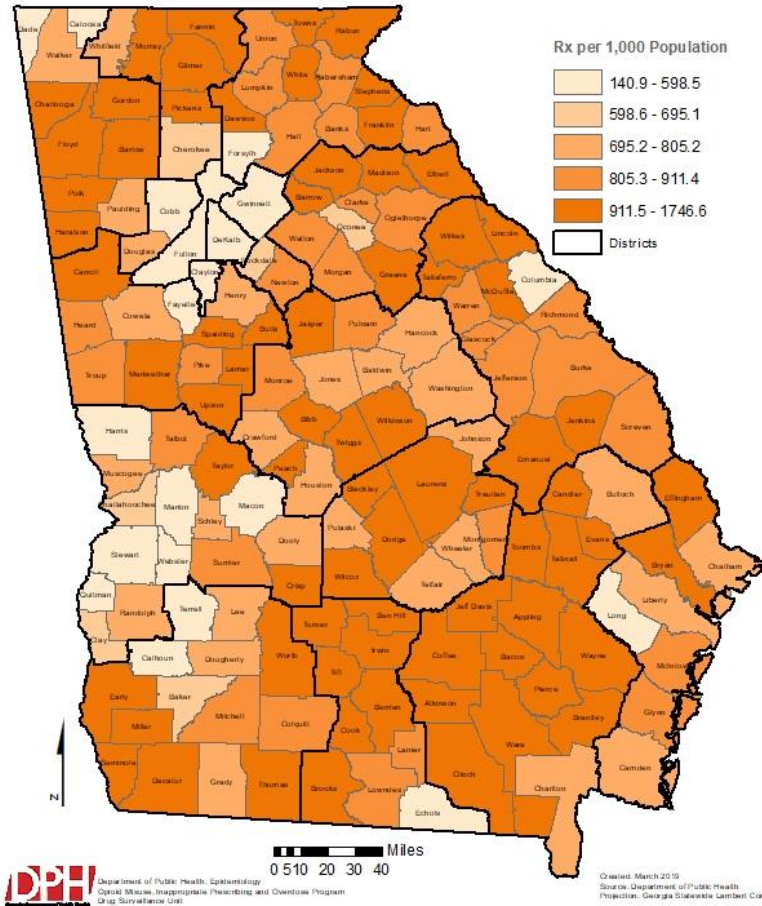


Overlapping opioid prescriptions refers to the total number of days that patients had more than one opioid prescription, among all prescription days. Patients with overlapping prescriptions for opioids are at greater risk of opioid use disorder and overdose. Overall in Georgia, the percent of patient days with overlapping opioid prescriptions decreased by 5% from Q1 2017 to Q4 2018.

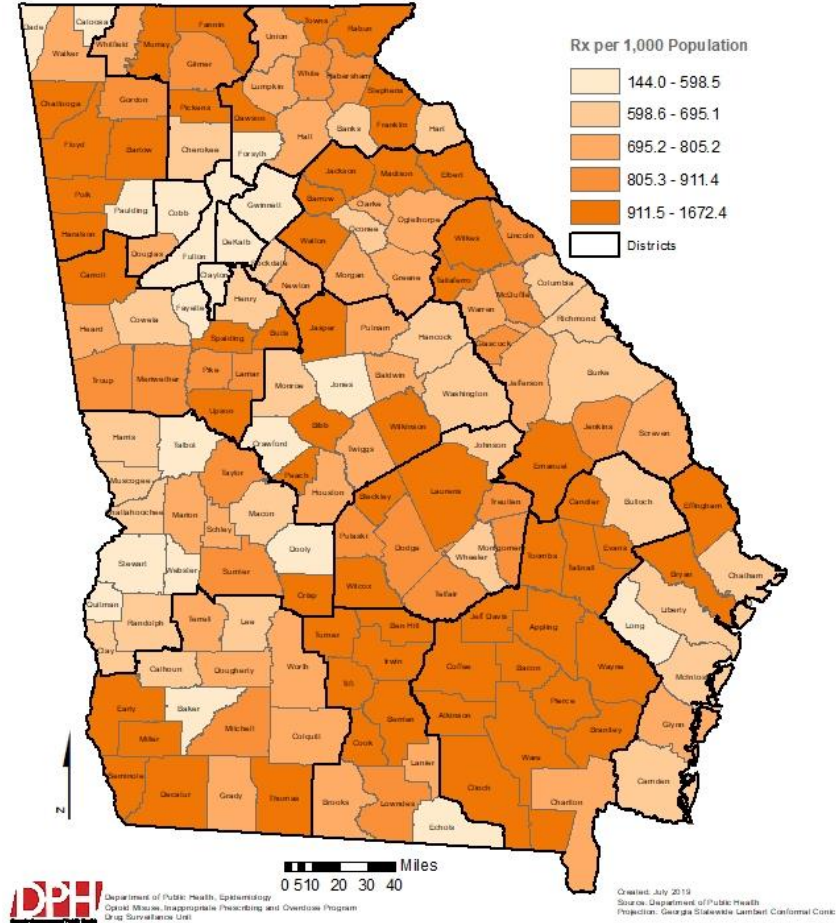


Overlapping opioid and benzodiazepine prescriptions refers to the total number of days that patients had an opioid and benzodiazepine prescription on the same day, among all opioid prescription days. The simultaneous use of opioid and benzodiazepine prescriptions can increase the risk of prescription drug misuse and overdose. Overall, in Georgia, the percent of patient days with overlapping opioid and benzodiazepine prescriptions opioids decreased by 12% from Q1 2017 to Q4 2018.

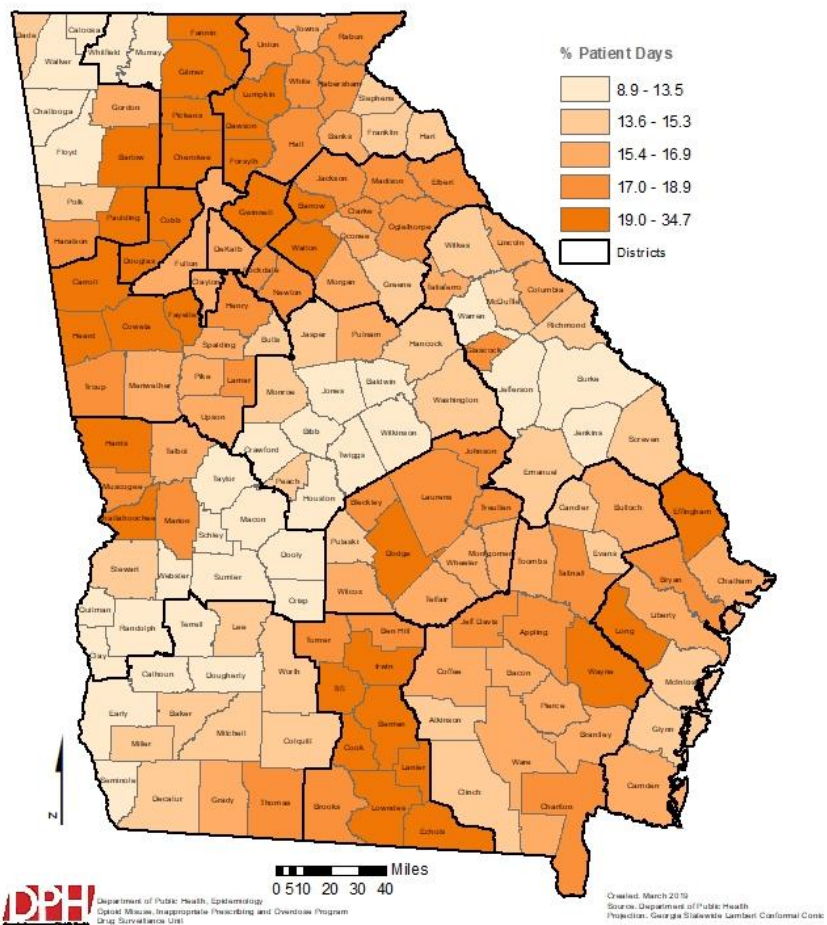
Age-Adjusted Opioid Prescriptions Rate, by County, Georgia, 2017



Age-Adjusted Opioid Prescriptions Rate, by County, Georgia, 2018

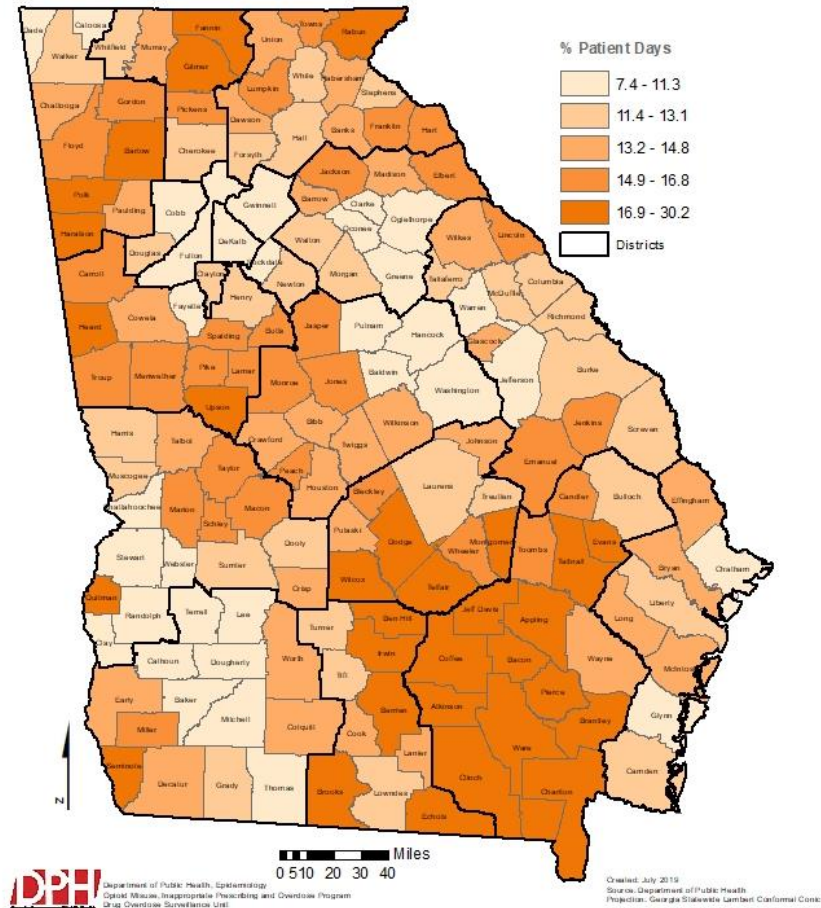


Percent Patient Days* of Overlapping Opioid Prescriptions, by County, Georgia, 2018



*Percent of days that patients had more than one opioid prescription on the same day in a given year.

Percent Patient Days* of Overlapping Opioid & Benzodiazepine Prescriptions, by County, Georgia, 2018



*Percent of days that patients had an opioid and benzodiazepine prescription on the same day in a given year.

Top Ten Opioids Prescribed, Georgia, 2018

Rank	Opioid drug	No. prescriptions 2018
1	Hydrocodone SA*	2,633,956
2	Oxycodone SA	1,748,749
3	Tramadol SA	1,597,438
4	Codeine	430,621
5	Buprenorphine	371,036
6	Morphine LA*	195,548
7	Fentanyl LA	127,338
8	Morphine SA	89,208
9	Methadone	88,995
10	Oxycodone LA	83,633

*SA: short-acting, LA: long-acting

Prescription Drug Monitoring Program Registrations and Patient Queries, Georgia, 2017–2018

PDMP user type	No. registered as of 12/31/2017	No. registered as of 12/31/2018	No. patient queries 2017	No. patient queries 2018
Dentist	2,789	4,538	8,448	59,668
Dispensing Physician	8	30	1	3,364
Medical Resident	968	1,996	2,205	24,950
Midwife	48	105	71	595
Nurse Practitioner	3,124	4,996	242,646	638,464
Optometrist	644	826	2	38
Out-of-State Pharmacist	7	108	5	3,945
Out-of-State Prescriber	30	134	216	14,469
Pharmacist	9,738	11,169	1,291,507	2,027,187
Pharmacist's Delegate	194	289	20,064	35,329
Physician (MD, DO)	17,691	24,074	1,440,733	3,069,327
Physician Assistant	2,094	2,653	121,454	279,406
Podiatrist	251	395	1,743	8,163
Prescriber Delegate	178	2,694	14,052	450,849
Veterans Affairs Prescriber	49	91	282	2,775
TOTAL	37,813	54,098	3,143,429	6,618,529

Prescription Drug Monitoring Program Indicators, Georgia, 2017–2018

See Prescription Drug Monitoring Program Data Indicators table for description of indicators below

Indicator description	2017					2018				
	Total	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
No. opioid prescriptions	8,001,050	2,093,949	2,073,768	1,942,493	1,890,840	7,487,527	1,919,636	1,903,842	1,836,649	1,827,400
No. stimulant prescriptions	2,261,285	617,005	547,395	538,580	558,305	2,527,922	656,480	612,226	628,290	630,926
No. benzodiazepine prescriptions	3,584,637	921,796	913,215	871,978	877,648	3,494,764	928,883	907,315	845,145	813,421
Opioid Rx/ 1,000 population (age adjusted)	767.2	N/A	N/A	N/A	N/A	711.8	N/A	N/A	N/A	N/A
No. opioid patients	2,177,640	979,143	962,603	913,093	897,725	2,018,390	894,898	886,179	855,654	847,979
Opioid patients/ 1,000 population	208.8	93.9	92.3	87.6	86.1	191.9	85.1	84.2	81.3	80.6
Days/ opioid prescription	18.1	18.0	18.1	18.1	18.1	18.2	18.3	18.2	18.2	18.2
% Patients receiving avg. daily dose >= 90 morphine milligram equivalents	7.9	8.1	7.8	7.9	7.7	6.2	6.6	6.2	6.0	5.9
Multiple provider episodes/ 100,000 population	20.3	23.8		16.8		12.2	14.5		9.9	
% Opioid naïve patients receiving long acting opioids	10.3	10.7	10.2	10.0	10.5	12.0	19.9	9.4	9.4	9.6
% Patient days with overlapping opioid prescriptions	17.7	17.6	18.1	18.3	17.0	17.0	16.9	17.3	16.9	16.8
% Patient days with overlapping opioid and benzodiazepine prescriptions	14.0	13.9	14.3	13.9	13.8	13.1	13.6	13.8	12.7	12.2

Prescription Drug Monitoring Program Indicators by Age and Sex, Georgia, 2018

See Prescription Drug Monitoring Program Data Indicators table for description of indicators below

	Indicator						
	No. opioid Rx	No. stimulant Rx	No. benzo. Rx	Opioid Rx/ 1,000 population	No. opioid patients	Opioid patients/ 1,000 population	Avg days/ opioid Rx
Age Group							
<1 year	627	9	431	4.9	518	4.1	13.0
1-4 years	5,851	1,708	6,737	11.0	5,051	9.5	7.7
5 -14 years	40,639	867,085	30,278	28.7	31,897	22.6	7.5
15-24 years	254,316	476,166	86,204	176.0	176,056	121.8	5.9
25-34 years	651,423	387,258	274,795	442.2	275,896	187.3	10.3
35-44 years	991,575	336,832	474,371	722.4	298,961	217.8	15.1
45-54 years	1,409,081	255,171	664,174	998.3	344,890	244.4	18.5
55-64 years	1,879,290	145,486	833,159	1461.7	378,462	294.4	20.9
65-74 years	1,398,135	49,372	643,083	1561.4	301,212	336.4	21.3
75-84 years	637,038	7,711	338,617	1522.7	150,194	359.0	21.2
85+ years	219,552	1,124	142,913	1497.3	55,253	376.8	20.2
Sex							
Male	3,094,257	1,358,894	1,187,078	604.9	832,572	162.8	18.4
Female	4,387,736	1,168,107	2,304,469	811.9	1,184,231	219.1	18.1

Opioid Overdose Surveillance and Response Information/Resources

To report an increase in overdoses, a potential overdose cluster, or any other unusual drug-related event, call the Georgia Poison Center at 1-800-222-1222.

Please see <https://dph.georgia.gov/stopopioidaddiction> for more information on how the Georgia Department of Public Health (DPH) is working to combat the opioid epidemic, including:

- Opioid and substance misuse response: <https://dph.georgia.gov/georgias-opioid-response>
- Prescription Drug Monitoring Program (PDMP): <https://dph.georgia.gov/pdmp>
- Drug Surveillance Unit: <https://dph.georgia.gov/drug-surveillance-unit>

Please see <https://dph.georgia.gov/opioid-epidemic-individuals-and-families> for information on the opioid epidemic for **individuals and families**, including:

- Addiction prevention
- Drug take-back
- Signs of an overdose and steps to take
- Naloxone information
- Georgia's Prescription Drug Monitoring Program (PDMP)
- Georgia's Medical Amnesty Law
- Harm reduction
- Neo-natal abstinence syndrome
- Treatment resources

Please see <https://dph.georgia.gov/opioid-epidemic-medical-providers-and-pharmacists> for information on the opioid epidemic for **medical providers and pharmacists**, including:

- Steps providers can take to help prevent opioid misuse and addiction in their patients
- Prescribing guidelines
- Georgia's Prescription Drug Monitoring Program (PDMP)
- Georgia's Naloxone Standing Order
- Georgia's Medical Amnesty Law

Please see <https://dph.georgia.gov/opioid-epidemic-first-responders-and-ems> for information on the opioid epidemic for **law enforcement and EMS**, including:

- Georgia's Prescription Drug Monitoring Program (PDMP)
- Responder safety
- Georgia's Medical Amnesty Law
- Georgia's Naloxone Standing Order
- Naloxone administration
- Case documentation guidelines

Georgia Department of Public Health (DPH), Epidemiology Section, Drug Surveillance Unit
<https://dph.georgia.gov/drug-overdose-surveillance-unit>

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