



PRESCRIPTION DRUG MONITORING PROGRAM

2022 Annual Report

Arkansas Department of Health

4815 W. Markham St, Slot 10
Little Rock, AR 72205

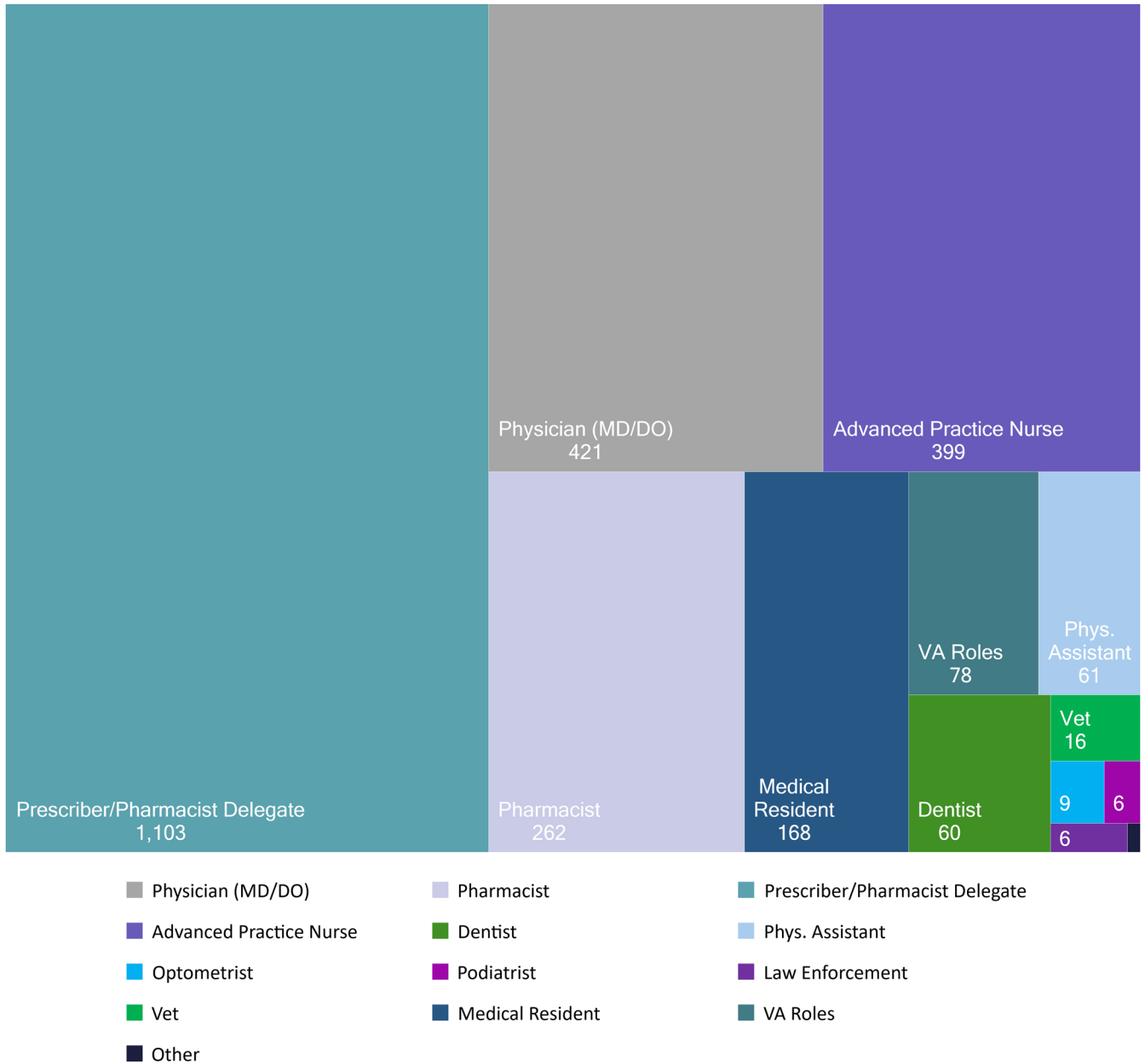


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User Information

Figure 1: New Registered PDMP Accounts, Arkansas 2022.

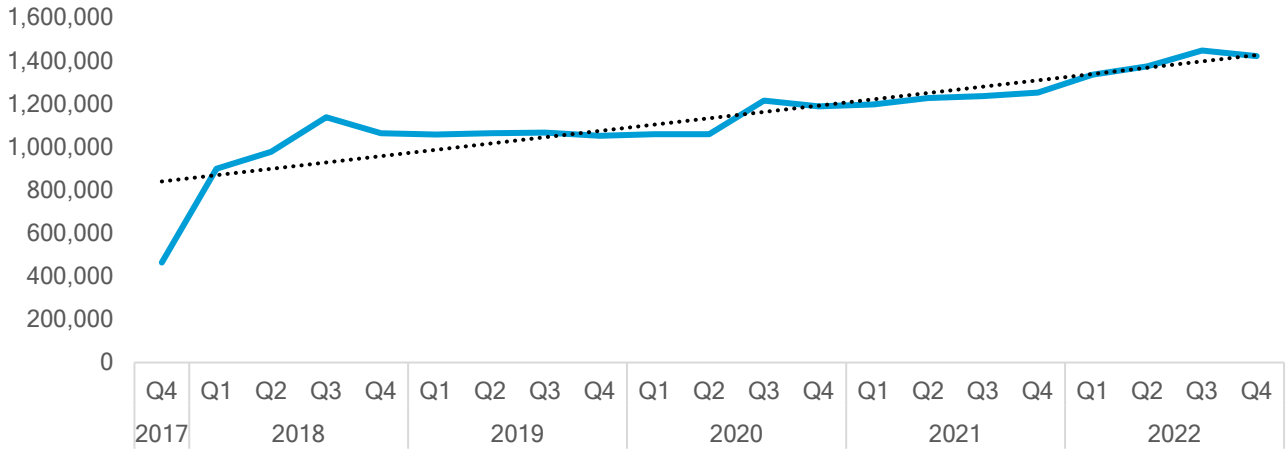


Source: Tableau, Bamboo Health

PDMP Usage

Since the change to the PMP AWARE web portal system at the end of 2017, queries by Arkansas users of the PDMP has been trending up.

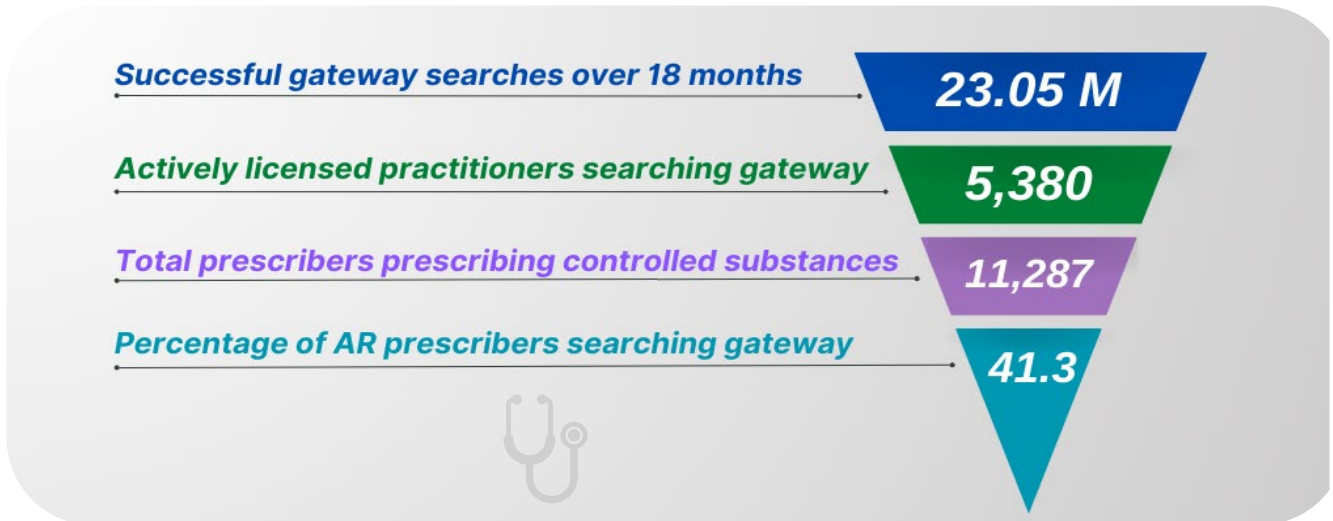
Figure 2: Total PDMP Queries by AR Users, Arkansas 2022.



Source: Tableau, Bamboo Health

In 2021, the PDMP was able to support with grant funding the Gateway integration of the PDMP to electronic health records, pharmacy management systems and health information exchanges. At the end of 2022 over 41% of providers prescribing controlled substances were searching using the gateway, a 5% increase from the end of 2021.

Figure 3: AR PDMP Users Searching Integrated Gateway, Arkansas 2022.

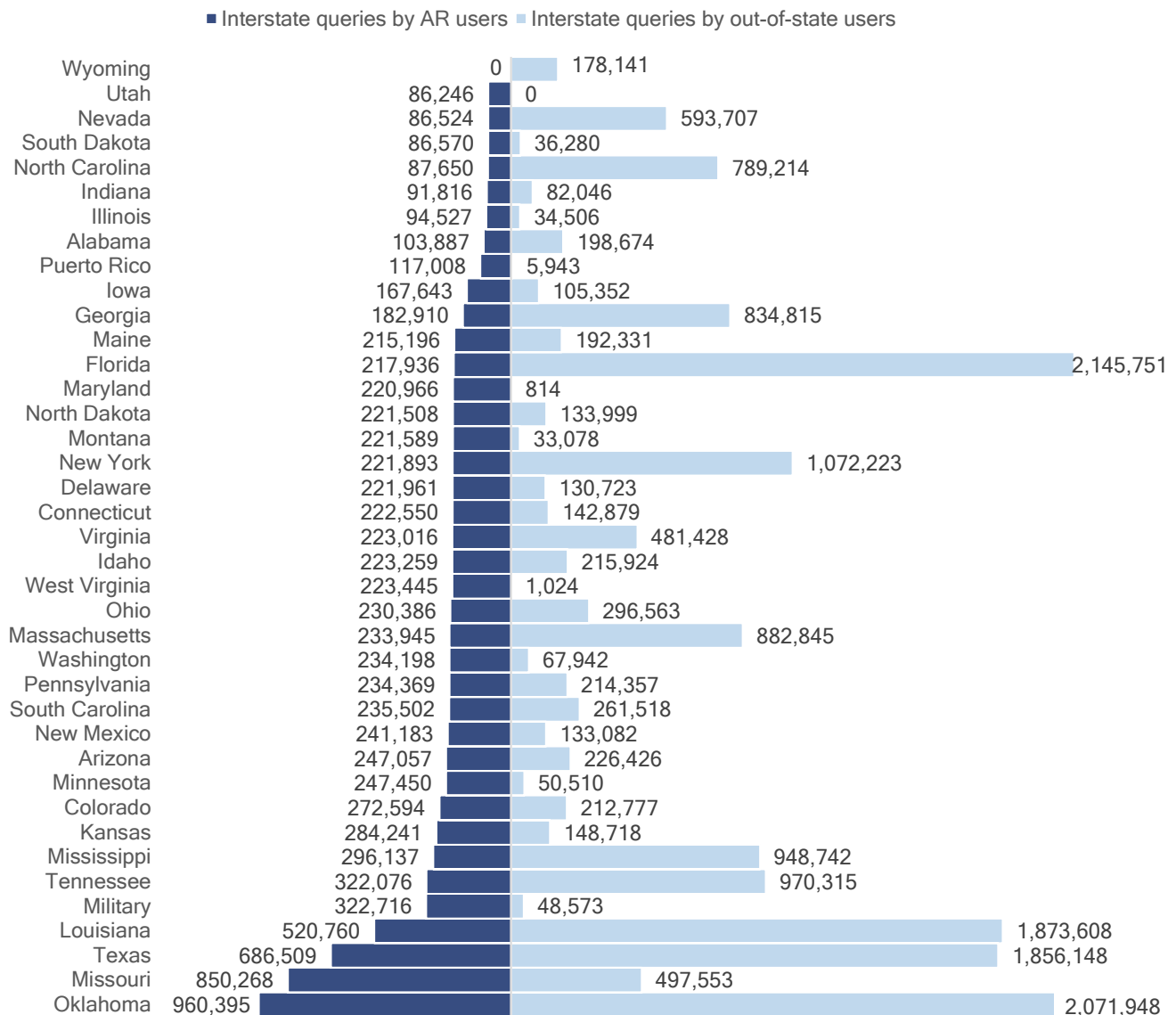


Source: Tableau, Bamboo Health

Interstate Data Sharing

Arkansas currently has PDMP data sharing agreements with 38 states, the Military Health Systems, Puerto Rico, and Washington DC. Figure 4 shows the interstate queries from 2022. The left side of the chart reflects queries by Arkansas users accessing other states data, and the right side of the chart reflects queries by out-of-state users accessing Arkansas data. A query does not indicate that a patient record was found and returned.

Figure 4: Interstate query counts between Arkansas and PDMP data sharing locations, 2022.



Source: Tableau, Bamboo Health

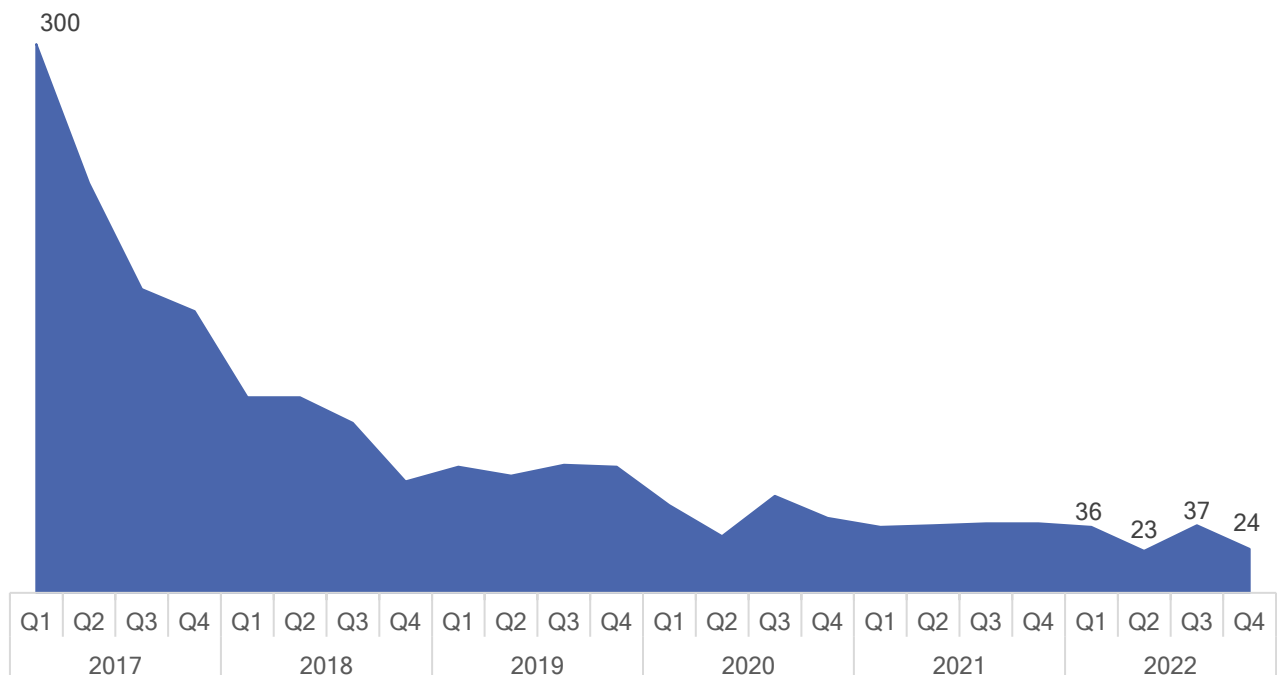
*Includes only queries with states using the PMP InterConnect system. Does not include Gateway requests.

Multiple Provider/Dispenser Incidence

The PDMP will alert users if there are patients that seem to have a recent history of controlled prescriptions from multiple providers. The practice of seeking prescriptions for the same medicine or drug class from multiple providers is known as doctor shopping. In Arkansas, the threshold for flagging potential doctor shopping is when a patient fills prescriptions from five different providers at five different pharmacies within 90 days. Once this threshold is met, the PDMP will send a clinical alert to all users associated with the patient.

Arkansas began tracking doctor shopping behavior in 2017. Since then, there has been an 92% decrease in flagged individuals, and in 2022 the numbers reached as low as 23 for a quarter.

Figure 5: Individuals with Prescriptions from Five or More Prescribers Dispensed at Five or More Pharmacies per Quarter, Arkansas 2017–2022.



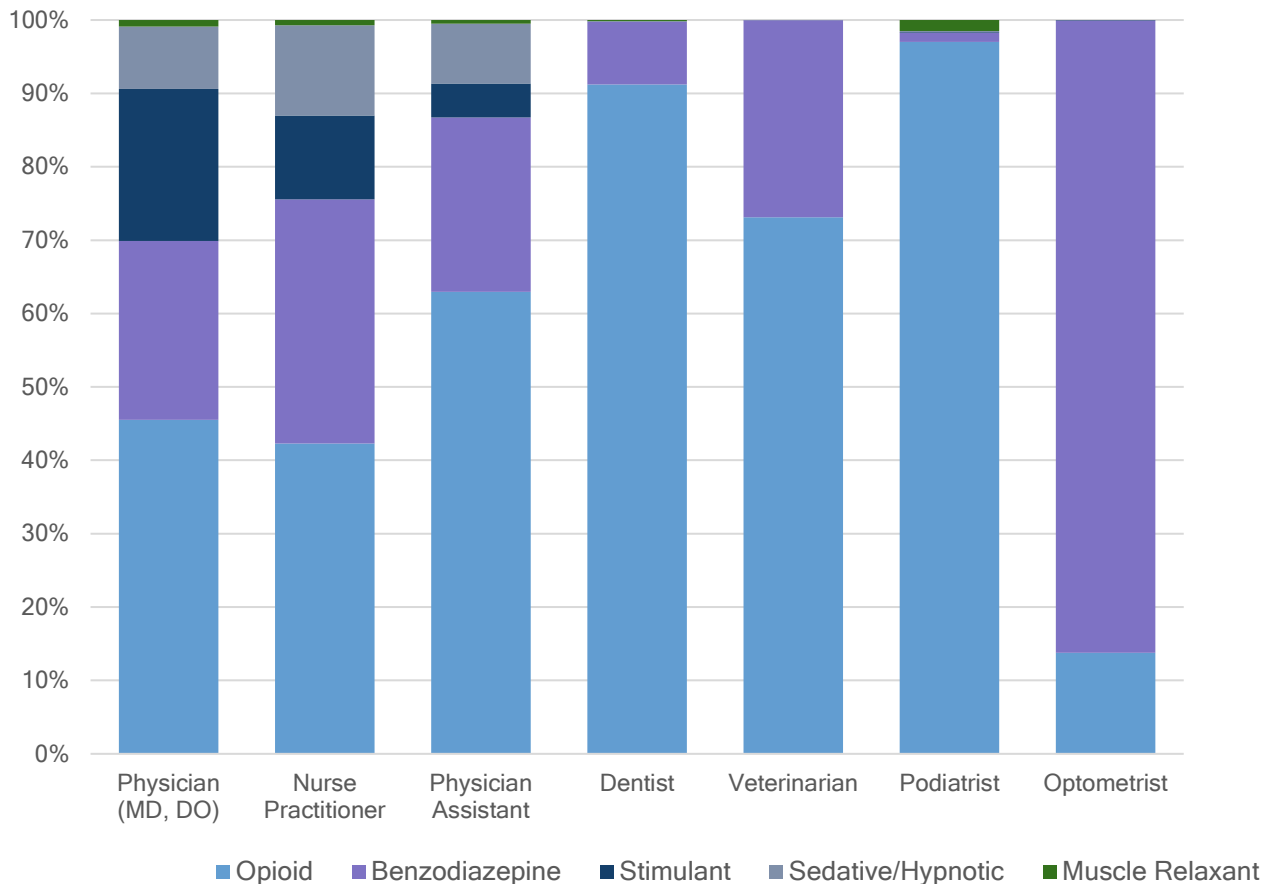
Source: PMP AWARE, Bamboo Health

Provider Prescribing by Drug Class

Many different provider types prescribe controlled substances in their practice. Professionals that commonly prescribe drugs reported to the PDMP include physicians (both MD and DO), nurse practitioners, physician assistants, dentists, veterinarians, podiatrists, and optometrists.

In 2022, the class with the highest percentage of prescriptions across nearly all provider types were opioids followed by benzodiazepines. The only exception were optometrists, who prescribed benzodiazepines more frequently than opioids.

Figure 6: Most Frequently Prescribed Drug Classes by AR Providers to AR Residents, Arkansas 2022.



Source: AR PDMP

Dispensations by Drug Class

The top five controlled drug classes dispensed in Arkansas are opioids, benzodiazepines, stimulants, sedative/hypnotics, and muscle relaxants. In 2022, the number of prescriptions and pills dispensed decreased across all classes except for stimulants.

Table 1: Top Selling Prescription Drugs by Class for AR Residents by AR Prescribers, Arkansas 2021-2022.

Drug Class	2021 Prescriptions*	2021 Pills Sold**	2022 Prescriptions*	2022 Pills Sold**
Opioid	2,677,232	141,544,277	2,611,077	133,103,034
Benzodiazepine	1,434,249	73,637,175	1,399,576	67,426,050
Stimulant	1,004,916	38,754,858	1,072,434	40,691,718
Sedative/Hypnotic	499,629	16,395,112	495,370	16,289,917
Muscle Relaxant	45,341	3,046,754	39,359	2,667,442
Total	5,661,367	273,378,176	5,617,816	260,178,161

Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification

* Includes all dosage forms – liquids, patches, tablets, capsules, suspensions, etc.

**Includes only solid dosage forms – capsules, tablets, pills, etc.

Buprenorphine not removed

DRUG CLASSES

Opioids: Medications used primarily to treat pain. This class of drugs includes hydrocodone, oxycodone, morphine, and others. Opioids also include buprenorphine, a medication used to treat opioid use disorder.

Benzodiazepines: Medications often prescribed for anxiety, panic attacks, insomnia, seizures, and muscle spasms. This class includes alprazolam, diazepam, and others.

Stimulants: Medications commonly prescribed to treat attention deficit hyperactivity disorder and narcolepsy. These drugs include methylphenidate and dextroamphetamine along with phentermine, which is used to treat obesity.

Sedative/Hypnotics: Medications used to treat insomnia, including zolpidem, zaleplon and eszopiclone.

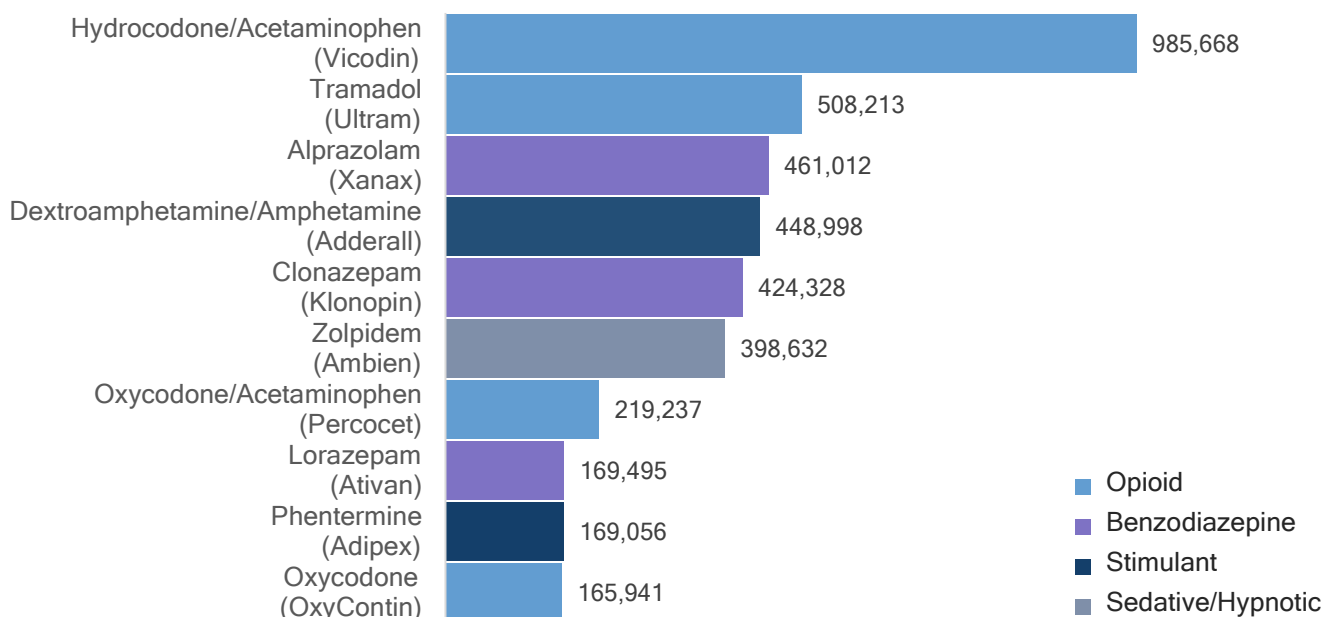
Muscle Relaxants: Medication prescribed to treat muscle-related symptoms, like spasticity and spasms. The majority of prescriptions are for carisoprodol.

Dispensations by Prescription Drug

The 10 controlled substances most commonly dispensed and authorized by Arkansas providers to Arkansas residents are shown below. The list is dominated by hydrocodone/acetaminophen, and includes a mixture of opioids, benzodiazepines, stimulants, and sedative/hypnotics. Figure 7 shows the commonly dispensed generic drug names, an example of a brand name, the drug class, and the number of prescriptions filled in 2022.

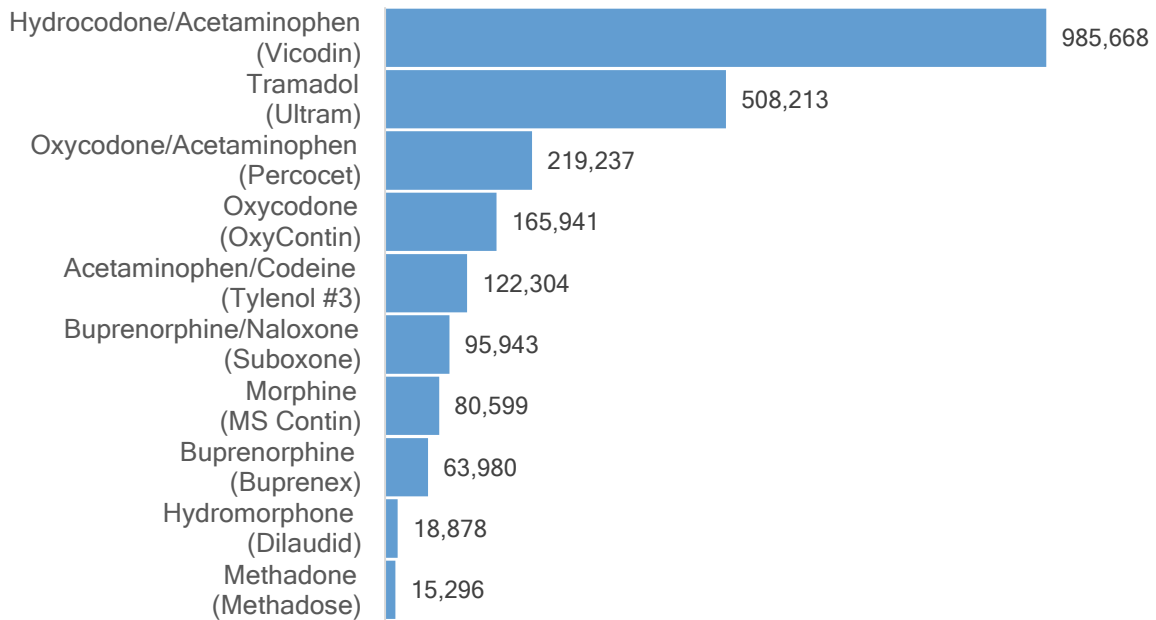
Figures 8 and 9 show the most dispensed opioids and stimulants in 2022.

Figure 7: Most Frequently Prescribed Controlled Prescription Drugs by AR Providers to AR Residents, Arkansas 2022.



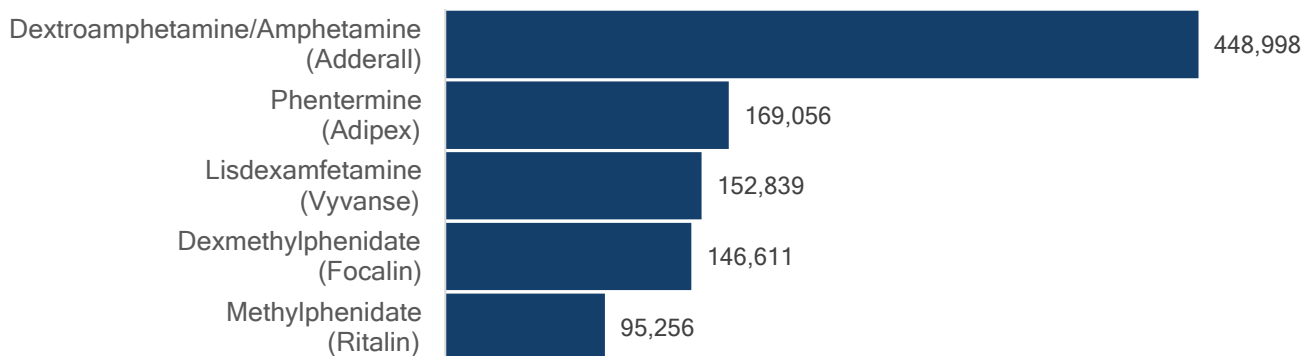
Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification

Figure 8: Most Frequently Prescribed Opioids by AR Providers to AR Residents, Arkansas 2022.



Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification

Figure 9: Most Frequently Prescribed Stimulants by AR Providers to AR Residents, Arkansas 2022.

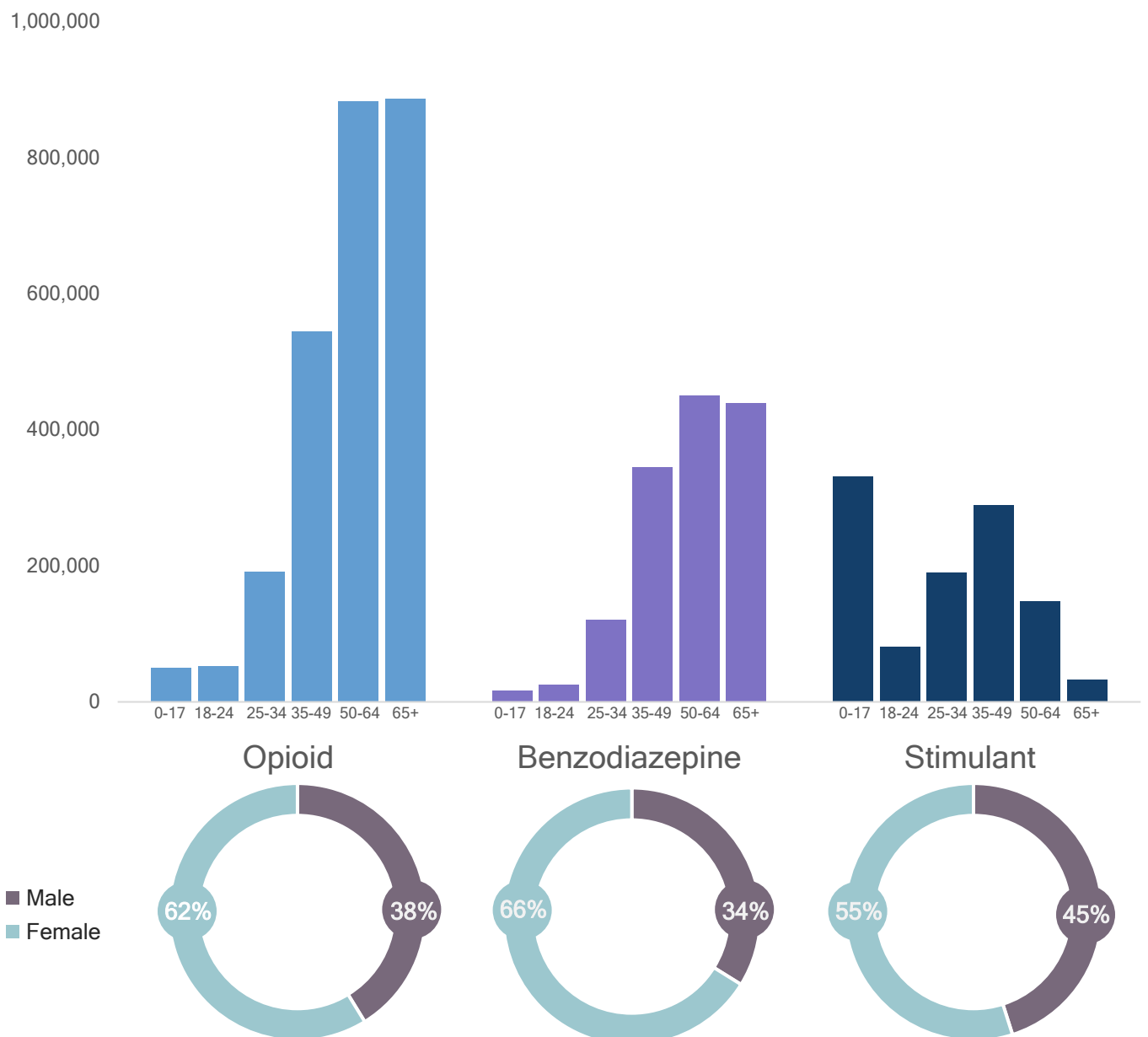


Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification

Dispensations by Age and Sex

Drug class prescribing varies by the age and gender of the patient. In Arkansas, the majority of prescriptions across all classes were prescribed to females. In 2022, the age distribution for stimulants were distinctly different compared to opioids and benzodiazepines.

Figure 10: Opioid, Benzodiazepine, and Stimulant Prescriptions by Age and Sex, Arkansas 2022.

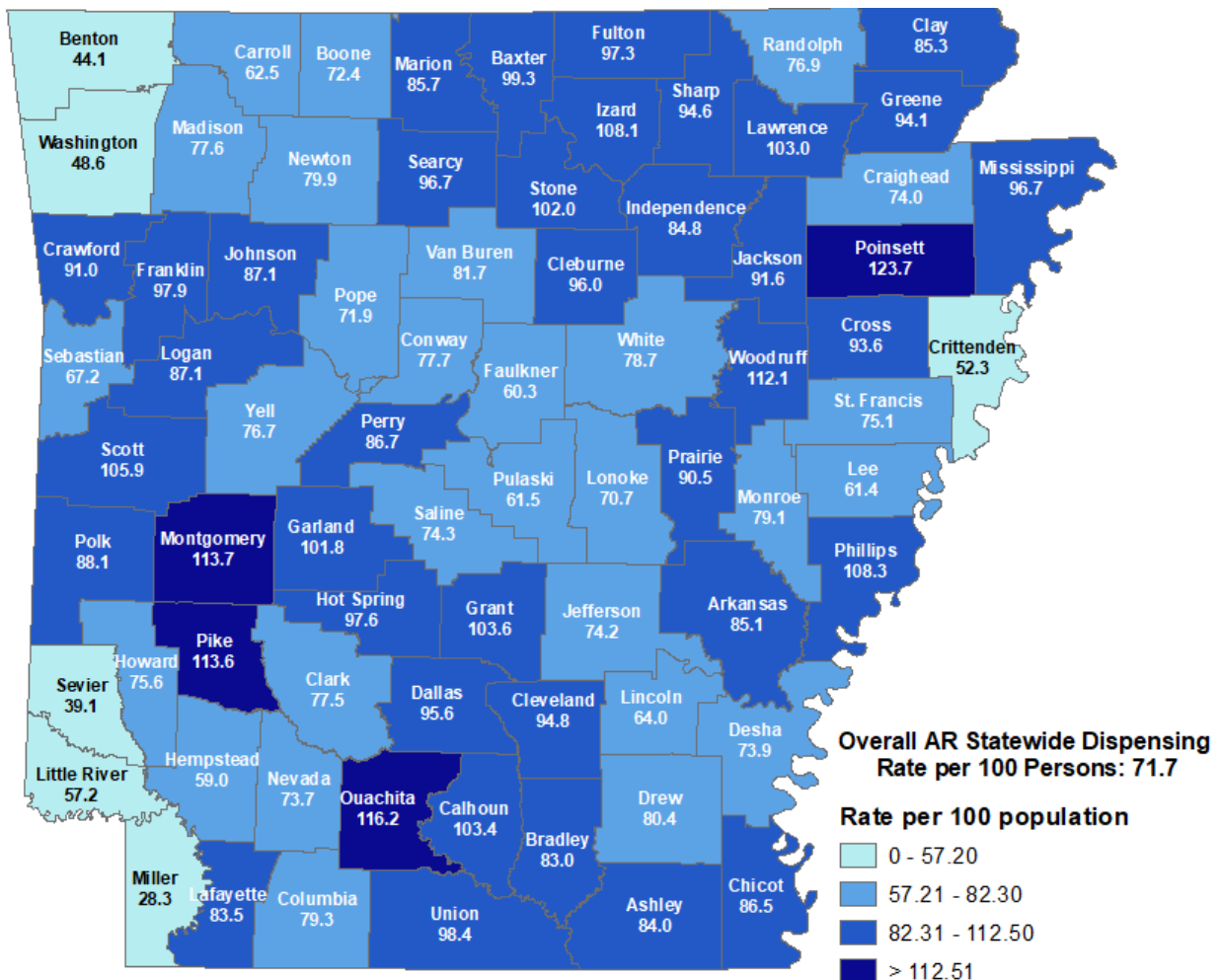


Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification Prescriptions written by AR prescribers to AR residents

Opioid County Rates

The opioid dispensing rate describes the number of opioid prescriptions dispensed per 100 people. In 2022, Arkansas had an opioid dispensing rate of 71.67. Individual counties ranged from 28.31 (Miller County) to 123.73 (Poinsett). There are 13 counties in Arkansas that had dispensing rates over 100, which means that more than one opioid prescription per person was dispensed in 2022. That number is decreased from 22 counties in 2021.

Figure 11: Opioid Dispensing Rates per 100 People per County, Arkansas 2022.



Data exclude buprenorphine products.
Location is based on county of patient address.
Prescriptions written by AR prescribers to AR patients.

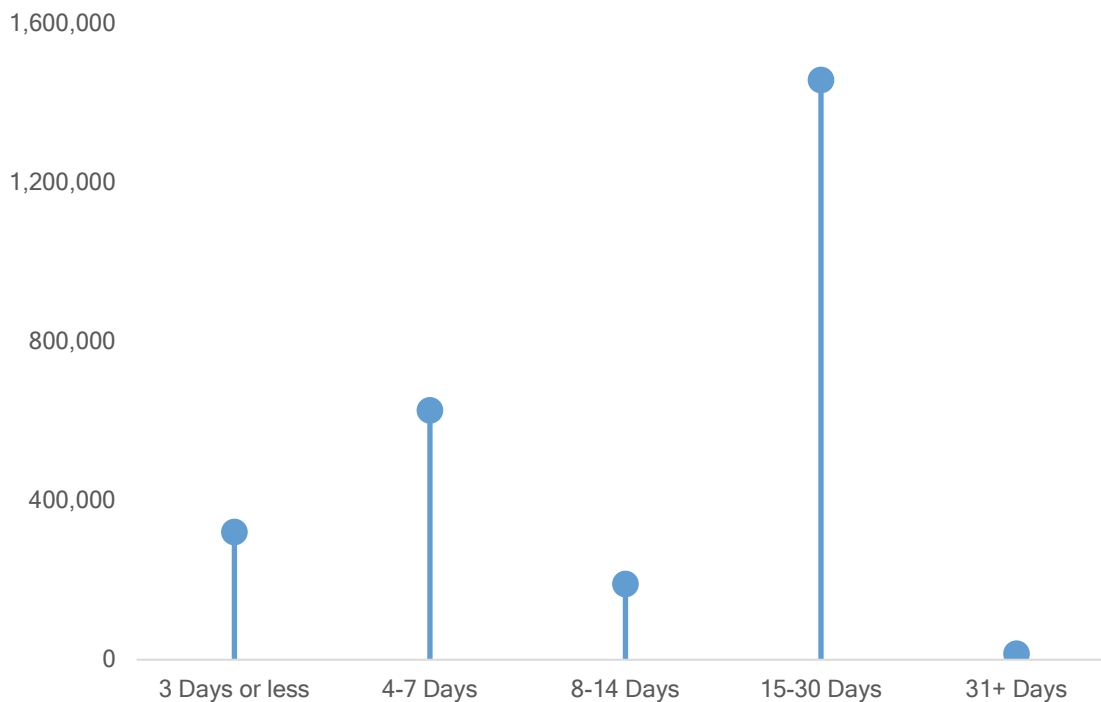
Source: AR PDMP

Opioid Prescription Duration

In 2016 the CDC released guidelines for prescribing opioids for chronic pain in an effort to encourage safe opioid prescribing practices. The guidelines state that when treating acute pain, the duration of the prescription should be no longer than needed for the pain, which is typically three days or less, and that longer than 7 days is rarely needed. The CDC encourages clinicians to evaluate the efficacy of long-term opioid treatment within a month and re-evaluate every three months.

Figure 12 shows that in Arkansas there were far more prescriptions with a duration of 2-4 weeks than any other length of time in 2022.

Figure 12: Duration of Opioid Prescriptions for AR Residents by AR Prescribers, Arkansas 2022.



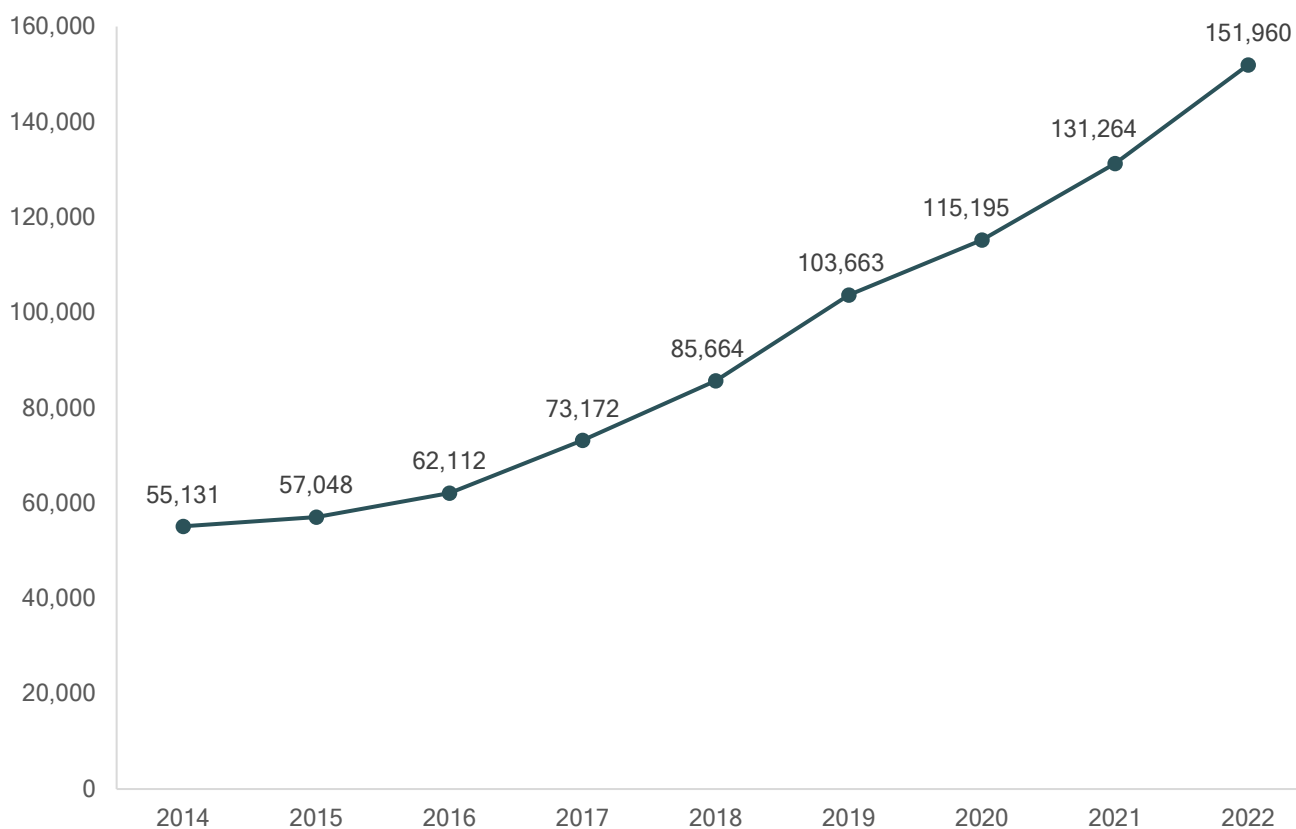
Source: AR PDMP

Buprenorphine

Buprenorphine is an opioid partial agonist that suppresses or reduces cravings for opioids and can be prescribed to treat Opioid Use Disorder (OUD). Buprenorphine is commonly combined with naloxone for treatment of OUD.

Since the Arkansas PDMP began tracking prescriptions in 2014, prescriptions for buprenorphine products have been steadily rising. In 2022, there were nearly 100,000 more prescriptions than in 2014.

Figure 13: Buprenorphine Prescriptions by Year for AR Residents by AR Prescribers, Arkansas 2014-2022.

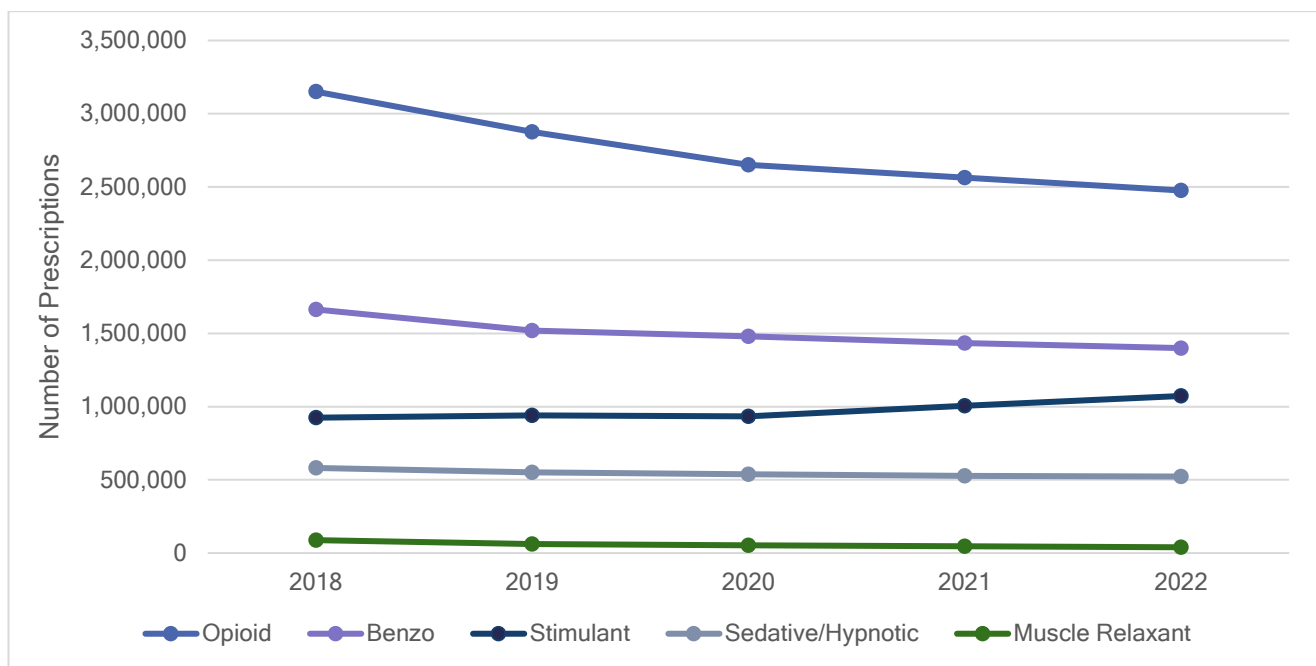


Source: AR PDMP

Five Year Prescription Trends of Most Common Therapeutic Drug Classes

Since 2018, prescriptions for most major scheduled drug classes have been decreasing in Arkansas. Across the five major scheduled drug classes, only prescriptions for stimulants have not decreased. Opioids continue to dominate all scheduled prescriptions, but they have had a much steeper decline in the past 5 years than all other drug classes.

Figure 14: Drug Prescriptions by Drug Class per Year for AR Residents by AR Prescribers, Arkansas 2018-2022.

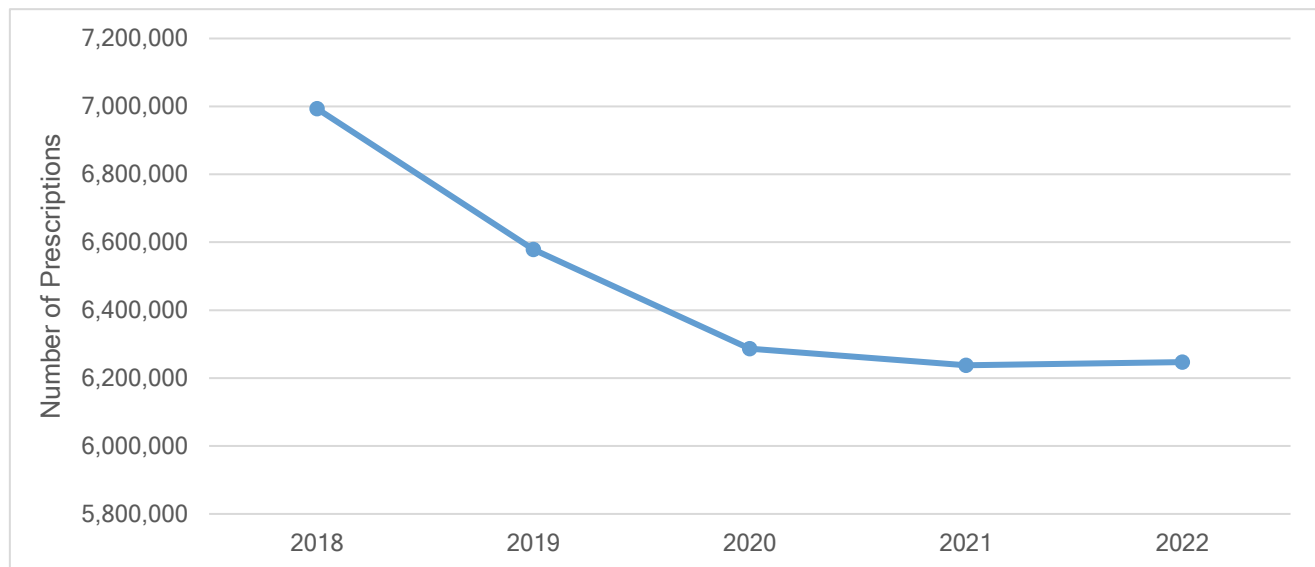


Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification
Includes all dosage forms – liquids, patches, tablets, capsules, suspensions, etc.
Buprenorphine removed.

Five Year Prescription Trends of All Scheduled II-V Controlled Substances*

Figure 15 shows the five-year trend for all schedule II-V prescriptions in Arkansas, including prescriptions not captured by the five most common therapeutic drug classes, such as testosterone, pseudoephedrine and phenobarbital. Scheduled drug prescriptions decreased significantly between 2018 and 2020 but have remained fairly stable since.

Figure 15: All Schedule II-V Drug Prescriptions per Year for AR Residents by AR Prescribers, Arkansas 2018-2022.



Source: AR PDMP merged with CDC Opioid List and AHFS Pharmacologic-Therapeutic Classification
Includes all dosage forms – liquids, patches, tablets, capsules, suspensions, etc.

*Including products such as testosterone, pseudoephedrine, phenobarbital, etc.

Acknowledgements

Prescription Drug Monitoring Program Staff

PDMP Administrator
Jamie Turpin, PharmD

PDMP Epidemiologist
Keilya Embry, MPH

PDMP Registered Pharmacist
Laura Cima, PharmD

PDMP Health Program Specialist I
Job Toussaint, MPH

PDMP Health Program Specialist II
Jazalyn Vera-Bowen, B.S., CTTS