

A photograph of a forest path with sunlight filtering through the trees. The path is made of dirt and fallen leaves, leading into the distance. Tall, thin trees line both sides of the path, and the sun is shining brightly from the end of the path, creating a warm, golden glow and lens flare effects. The overall atmosphere is peaceful and natural.

m MINNESOTA
BOARD OF PHARMACY

Prescription Monitoring Program

annual report
2020

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EXECUTIVE SUMMARY

2020 marked the 11th year of operation of the Minnesota Board of Pharmacy's, Prescription Monitoring Program (PMP). In 2009, [MN Stats. §152.126](#) required the Board of Pharmacy (Board) to develop and maintain a database of controlled substance prescriptions for promoting public health and welfare by detecting abuse, misuse, and diversion of controlled substance prescriptions. The intent of the PMP database is to assist in improving patient care and reducing the misuse of controlled substances.

The Minnesota Board of Pharmacy is in its second full year of utilizing a more robust PMP report within Appriss Health's PMP AWARe© system. . This upgraded system presents an enhanced, interactive report to prescribers and pharmacists. Providing the PMP data in a more efficient, meaningful way assists healthcare providers in digesting the prescription data presented in a report. It is intended to ease in the interpretation of the prescription information and highlight potential high-risk prescription histories or activities, possibly leading to referrals to treatment if needed. A treatment locator is embedded within the report.

In August of 2020 the Board of Pharmacy, through grants received from the federal government and other state agencies, made available a state-wide license to enable one-click access to the state's PMP database using a third party vendor solution for a one year time frame. This initiative was launched prior to the January 1, 2021 statutory requirement for prescribers to review a patient's PMP history prior to prescribing an opiate (conditions and exceptions apply). Minnesota continues to increase the volume of healthcare providers that have one-click access to view a patient's PMP history without leaving the workflow of their electronic health record (EHR) or pharmacy dispensing software (PDS) system.

Minnesota staff continue their work towards providing the highest quality of data in a timely manner. Providing timelier, more error-free data reduces time spent researching prescription histories and improves trust in the PMP as a tool, increasing utilization of the PMP and therefore providing a more complete medical history to care for patients. High quality data must be made available in a seamless process for busy healthcare providers.

In 2020, the PMP began electronically providing prescribers of controlled substances a PMP Prescriber Report. The report provides prescribers with a snapshot of their prescribing of controlled substances as reported to the MN PMP for the previous six months. In order to receive a PMP Prescriber Report, the prescriber must have an active PMP account, a defined role and specialty within their account, and have written at least one opioid, sedative, or stimulant prescription during the previous six month timeframe. PMP Prescriber Reports are strictly informational and are provided on a quarterly basis. The report is an aggregated view of their prescribing as compared to their peers. The MN PMP recognizes that no two practice settings are identical. The comparison with peer group is meant to give prescribers a point of reference.

- Over 6.4 million prescriptions, for federally scheduled II-V controlled substances, were reported as dispensed to the PMP database in 2020. That number reflects a **4.1% decrease** from 2019.
- More than 2.3 million prescriptions for Opiates were reported as dispensed to the PMP database in 2020, a **9.1% reduction** from the year prior.
- Of the top 100 prescribers of controlled substances reported, 89% have requested and obtained access to the MN PMP.
- Physician and Physician Assistant Role type account holders are the largest utilizers of delegates to access PMP searches. 39% and 38% respectively, of their PMP searches are performed on their behalf by an authorized delegate.
- The number of Minnesota prescribers that have one-click access to their patients' PMP history report directly within their electronic health record system **increased by 103%** from 2019 to 2020. The number of pharmacies within Minnesota with one-click access for their pharmacists increased by 20% during 2020. The result has been a significant change in how the PMP database is being accessed. This integration technology has increased one-click access searches in 2020 by **195%**, while account holders utilizing a delegate to perform searches in 2020 has decreased by 10% and direct web-portal access by an account holder has decreased by 31%.
- At the end of 2020, there were **22,345 MN licensed prescribers and pharmacists** approved for access to the system. This is significantly higher than the end of 2019, which showed 11,783 active account holders. In December 2019 all accounts that were created at the time of system migration to the AWARxE platform had aged to 12 months. At this 12 month anniversary, each account holder was notified to perform their required annual review and verification of demographics. A large number of account holders failed to perform this required task which resulted in account deactivation. Those with deactivated accounts were required to contact program staff to reactivate their accounts and then perform the review. 2020 reverifications due dates were staggered due to the varying response to reactivate, thereby eliminating the large volume of deactivated accounts this year. Additionally, future notifications to perform the required update have been more successfully responded to, likely as a result of the additional action step to contact program staff for account reactivation that was previously experienced.
- The total number of PMP searches conducted by permissible account holders, including health care providers and pharmacists, increased from 1,168,186 in 2016 to 2,985,475 in 2020, an **increase of 155.6%**.
- During 2020, all role types showed an increase in total patient searches, with the exception of dental and optometrist account holders. The total increase from 2019 was **18%**.
- In 2020, patient-requested reports **increased 13%** from 2019. These reports were mailed directly to the patient or sent via secure email to a third-party at the patients' written request.
- In 2020, the MN PMP staff continued to fulfill requests submitted by local, state, and federal law enforcement. PMP staff generated and released 616 reports (patient history, prescribing history, and/or dispensing history) based on a valid search warrant.

- 2020 was the sixth full year Minnesota participated in a system that enabled MN PMP account holders to request patient reports across state lines. In 2020, MN PMP staff added a connection to permissible account holders in one additional jurisdiction: Puerto Rico, creating a total of **43 connected states** and jurisdictions. Through our web-based system, authorized account holders in Minnesota requested their patients' PMP data more than **900,000 times** from participating states' PMP systems and more than **6.7M requests** were received from authorized account holders in participating states and jurisdictions.
- 2020 was also the sixth full year the MN PMP staff identified multiple prescriber and dispenser episodes by patients and notified the health care providers involved with that patient's care.

INTRODUCTION

There is growing evidence that prescription drug monitoring programs (PDMP/PMP) play an important role in the fight against prescription drug abuse. PMPs have proven to be effective in reducing prescription drug abuse, misuse, and diversion, assisting prescribers and pharmacists in managing their patient's care, identifying potential high-risk behavior, and aiding in drug investigations, amongst other efforts.

To begin addressing prescription drug abuse in the State, on May 25, 2007, the Governor signed into law [MN Stats. §152.126](#), which requires the Minnesota Board of Pharmacy (Board) to establish an electronic system for the reporting of controlled substance prescriptions that are dispensed to residents of the state. The Board subsequently implemented the Minnesota Prescription Monitoring Program (PMP). Collection of data from dispensers of controlled substances began on January 4, 2010 with authorized access to the data commencing on April 15, 2010. [MN Stats. §152.126](#) also requires the Board to appoint an advisory task force. This task force consists of at least one representative of the Department of Health and Department of Human Services; each health-related licensing board that licenses prescribers; professional associations representing the medical community, pharmacy community, nurses, and dentists; a consumer privacy or security advocate; a consumer or patient rights organization; and an association of medical examiners and coroners. The advisory task force advises the Board on the development and operation of the Minnesota Prescription Monitoring Program, including technical standards for reporting and proper analysis and interpretation of PMP data.

This annual report serves as an overview of the utilization of the database by prescribers, pharmacists, and other permissible account holders, as well as controlled substance prescription dispensing activities in the state. The report intends to educate individuals regarding the controlled substance prescription dispensing landscape in Minnesota as well as PMP database utilization by prescribers, pharmacists, and their delegates.

Prescription data assessed in this report consists of the timeframe 1/1/2020– 12/31/2020. Like previous annual reports, the term “controlled substance” refers to those medications that are classified federally as schedule II-V controlled substances only, unless otherwise noted. In comparing prescription counts to previous years, there are several items to be aware of:

- On December 4, 2018, the PMP database was migrated from the MN PMP RxSentry® system to the PMP AWAxR® system which is operated by Appriss Health. As such, prescription data that had been reported to the MN PMP's database previously was migrated to the new system. The original system used a different address resolving software than the more sophisticated (BI) tools available with the new software. A key difference in the BI tools is that counties are assigned by zip code whereas this was not the case previously. Due to this change in assignment, county-level prescription counts are different when viewing aggregate PMP data between the two systems, and the two data sets cannot be compared. Thus, PMP staff updated the tables in the 2018 Annual Report to include data from 2015-2017 using the new BI tools. The resulting tables with data from the 2018 Annual Report are carried forward into the 2020 Annual Report for sake of comparison.

- With the migration to the new software system in December 2018, a superior consolidation algorithm was applied to patient matching. Consolidation is an important feature as it groups patient records into one profile or concludes the records cannot be consolidated. It is a fine balance between false positives and false negatives, and aggregate patient counts may not be representative of individual patients. Because the consolidation algorithm used in differs from the consolidation algorithm used in our previous system, depictions of patient counts between the two datasets cannot be compared.
- In August 2020, the Board of Pharmacy through grants received from the federal government and other state agencies, made available a state-wide license to enable one-click access to the state's PMP database using a third-party vendor solution for a one year time frame. Prior to that there were a number of healthcare providers in Minnesota that were already utilizing this technology solution to access the MN PMP report from within the electronic health record (EHR) system or pharmacy management system (PMS). These established providers along with entities requesting a new connection were able to forgo the typical licensing fees related to this service by utilizing the Minnesota state-wide license. By the end of 2020, it is estimated that over **13,500 prescribers** and almost **500 pharmacies** within Minnesota had established one-click access to the PMP with this technology solution.
- In 2016, legislation passed to require dispensers to report gabapentin to the MN PMP. Gabapentin is not a federal or state controlled substance but must be reported to the MN PMP when dispensed.

Prescription data in the PMP database is as accurate as the records submitted by dispensers. There are various required fields and validation checks in place to aid pharmacies in clean data submission. Dispensers may edit, remove, or submit prescription records at any time to accurately reflect their dispensing histories. As a result, previous and future data requests may result in differing output of aggregate data.

In the interest of patient privacy, when less than ten of a medication is dispensed, it is reported as "<10" throughout the report.

OPERATIONS

The program is staffed by four full time positions: Controlled Substance Reporting Section Director, Pharmacist Consultant, Program Administrator, Program Coordinator. The Board receives an annual appropriation, for operation of the PMP, from the state government special revenue fund. The health-related licensing boards apportion between the Board of Medical Practice, Board of Nursing, Board of Dentistry, Board of Podiatric Medicine, and the Board of Pharmacy an amount paid through fees by each respective board. Each board's apportioned share is based on the number of prescribers and pharmacists licensed collectively by these boards. In 2020, the Board administered two Harold Rogers Prescription Drug Monitoring Program grants (2016 & 2018), from the U.S. Department of Justice/Office of Justice Programs/Bureau of Justice Assistance, to enhance the current electronic system, provide more robust analysis of PMP data, provide funding for outreach/education, and to integrate access to MN PMP reports into the clinical workflow for healthcare providers. The PMP also received funding through interagency agreements between the Minnesota Department of Health and the Minnesota Department of Human Services. Funding received was used to perform outreach/education events, including a four-part education session with continuing education credits made available upon completion, enhance the system to provide more informed prescribing, and promote access and utilization of the PMP using a statewide integration solution.

Prescription data is submitted to the PMP database by dispensing prescribers and pharmacies. All entities dispensing controlled substances in or into the State of Minnesota are required to report data daily, and dispensers who do not dispense a controlled substance on any given day are required to submit a "zero report" each day. PMP staff and a contracted vendor, audit the submission of data and the data itself to ensure compliance in reporting and data integrity. Noncompliant dispensers are communicated with by various means and a lack of response to the request to comply are referred to the Board's regulatory section for further consideration. At the end of 2020 the Board licensed over 1,900 pharmacies. Of them, over 1,600 were required to report data to the PMP database. Current law allows an exemption from reporting when;

1. The pharmacy is a licensed hospital pharmacy that distributes controlled substances for inpatient hospital care only;
2. The prescription is for an individual that resides in a health care facility as defined in [section 151.58, subdivision 2, paragraph \(b\)](#), when a drug is distributed through the use of an automated drug distribution system according to [section 151.58](#);
3. The prescription is for a drug sample that was packaged by a manufacturer and provided to the dispenser for dispensing as a professional sample pursuant to Code of Federal Regulations, title 21, part 203, subpart D;
4. The pharmacy or facility never dispenses controlled substances in or into the State of Minnesota.

On August 14th, 2020, the Confidentiality of Substance Use Disorder Patient Records regulation, 42 CFR Part 2 was revised. One of the revisions permits Opioid Treatment Programs (OTP) to report any substance use disorder (SUD) medication prescribed or dispensed by the program, so long as the patient consents and the state law requires the reporting. Concerns of stigma have been raised as well as the patient safety implications when prescribers and pharmacists do not have knowledge of the SUD therapy from OTPs in the PMP. For more information regarding these changes, [see 42 CFR Part 2](#).

PMP Data Submitters and/or dispensers receive system-generated, *File Status Reports* when errors or warnings occur in their submissions to the PMP database. System validation is performed on the various fields that are reported to the MN PMP in the dispenser's file. When field components fail validation, this information is relayed to the dispenser or PMP Data Submitter via the *File Status Report*. Dispensers are required to resolve prescription errors within seven days. Failure to do so may result in a referral to the Board of Pharmacy's regulatory investigators for further action. PMP staff audit for error resolution and matters of noncompliance. Data integrity and compliance in reporting are important initiatives for MN PMP staff.

PREScription DATA

In 2020, **6,449,860** federally scheduled II-V controlled substance prescriptions were reported to the PMP database as dispensed. These prescriptions resulted in **323,252,648** total units of controlled substances dispensed. Total units refer to the summation of all tablets, capsules, milliliters, grams, etc. reported as dispensed. Tables 1a and 1b list the top twenty controlled substance medications reported in 2020 by prescription count (1a) and then by quantity (1b). A comparison of prescription counts and quantities from 2016 – 2018 are also included. Hydrocodone/acetaminophen, previously the number one federal controlled substance reported to the MN PMP database, was surpassed by dextroamphetamine/amphetamine in 2018, as it pertains to prescription count. This trend remains true in 2019 and 2020. The number of dextroamphetamine/amphetamine prescriptions **increased 3.8%** from 2019 to 2020, while the number of hydrocodone/acetaminophen prescriptions reported **decreased 12.5%** from 2019 to 2020.

Table 1a. Top Twenty Controlled Substance Prescriptions Reported as Dispensed (Generic), 2020 - Rx Count

Drug	2016 Rx Count	2017 Rx Count	2018 Rx Count	2019 Rx Count	2020 Rx Count	% Change from '19 to '20
DEXTROAMPHETAMINE/AMPHETAMINE	743,478	793,503	840,861	878,209	911,153	3.8%
HYDROCODONE/ACETAMINOPHEN	1,083,645	941,526	793,542	693,354	606,775	-12.5%
OXYCODONE HCL	667,397	644,777	624,023	620,517	597,159	-3.8%
LORAZEPAM	543,146	520,877	494,782	478,541	474,120	-0.9%
TRAMADOL HCL	621,429	571,762	520,448	489,491	440,044	-10.1%
METHYLPHENIDATE HCL	408,175	412,915	415,519	420,416	402,216	-4.3%
ZOLPIDEM TARTRATE	478,685	444,673	414,568	380,826	356,095	-6.5%
CLONAZEPAM	421,018	401,631	379,157	362,627	350,295	-3.4%
ALPRAZOLAM	356,298	334,016	315,011	297,718	288,861	-3.0%
OXYCODONE HCL/ACETAMINOPHEN	543,330	462,137	374,178	315,714	274,766	-13.0%
LISDEXAMFETAMINE DIMESYLATE	160,238	162,435	159,220	168,015	178,525	6.3%
PREGABALIN	138,075	145,467	151,611	155,898	176,691	13.3%
BUPRENORPHINE HCL/NALOXONE HCL	66,275	81,924	103,484	131,556	149,179	13.4%
MORPHINE SULFATE	186,121	175,660	155,514	143,047	137,561	-3.8%
DIAZEPAM	174,939	161,334	151,145	142,801	129,433	-9.4%
HYDROMORPHONE HCL	94,048	95,986	91,479	92,299	90,365	-2.1%
ACETAMINOPHEN WITH CODEINE	160,251	139,125	118,303	101,096	88,738	-12.2%
PHENTERMINE HCL	72,826	79,901	85,121	86,332	87,297	1.1%
CODEINE PHOSPHATE/GUAIFENESIN	165,859	163,763	127,316	110,009	57,440	-47.8%
TESTOSTERONE CYPIONATE*	—	—	—	53,096	54,699	3.0%
TOTAL	7,798,905	7,422,137	6,985,041	6,728,876	6,449,860	-4.1%

*The dash does not represent the absence of dispensations in previous years, rather, it signifies the medication was not in the top 20 previously.

Table 1b. Top Twenty Controlled Substance Prescriptions Reported as Dispensed (Generic), 2020 – Quantity Dispensed

<i>Drug</i>	<i>2016 Quantity Dispensed</i>	<i>2017 Quantity Dispensed</i>	<i>2018 Quantity Dispensed</i>	<i>2019 Quantity Dispensed</i>	<i>2020 Quantity Dispensed</i>	<i>% Change from '19 to '20</i>
DEXTROAMPHETAMINE/AMPHETAMINE	34,145,751	35,487,541	36,980,659	38,271,915	39,600,838	3.5%
HYDROCODONE/ACETAMINOPHEN	57,653,136	48,914,751	39,899,880	33,438,214	29,290,892	-12.4%
OXYCODONE HCL	47,921,053	44,390,431	38,684,687	34,031,821	31,277,755	-8.1%
LORAZEPAM	24,672,179	22,950,880	21,000,132	19,321,162	18,828,852	-2.5%
TRAMADOL HCL	48,773,815	43,261,036	37,033,357	32,077,736	28,465,187	-11.3%
METHYLPHENIDATE HCL	20,325,764	20,060,634	19,589,147	19,408,551	18,579,862	-4.3%
ZOLPIDEM TARTRATE	16,180,474	14,812,186	13,929,882	12,830,466	12,248,774	-4.5%
CLONAZEPAM	25,161,088	23,603,806	21,820,302	20,135,480	19,425,705	-3.5%
ALPRAZOLAM	19,202,429	17,448,681	16,040,110	14,580,538	14,081,820	-3.4%
OXYCODONE HCL/ACETAMINOPHEN	30,905,948	26,430,476	21,489,154	18,090,890	16,294,239	-9.9%
LISDEXAMFETAMINE DIMESYLATE	5,061,593	5,111,202	5,010,162	5,271,020	5,626,754	6.7%
PREGABALIN	11,407,916	11,949,045	12,421,305	12,779,069	15,124,244	18.4%
BUPRENORPHINE HCL/NALOXONE HCL	2,726,753	3,284,673	3,957,692	4,729,364	5,512,197	16.6%
MORPHINE SULFATE	10,747,544	9,459,779	8,074,398	7,119,046	6,368,222	-10.5%
DIAZEPAM	7,401,917	6,581,729	5,959,046	5,405,983	5,054,671	-6.5%
HYDROMORPHONE HCL	6,688,125	6,151,268	5,414,629	4,834,024	4,519,977	-6.5%
ACETAMINOPHEN WITH CODEINE	7,412,164	6,302,606	5,133,446	4,171,042	3,657,471	-12.3%
PHENTERMINE HCL	2,841,638	3,117,118	3,325,574	3,448,247	3,556,872	3.2%
CODEINE PHOSPHATE/GUAIFENESIN	28,338,322	27,876,952	21,420,894	18,070,002	9,732,400	-46.1%
TESTOSTERONE CYPIONATE*	—	—	—	188,750	213,739	13.2%
TOTAL	449,821,296	416,572,867	374,973,596	344,420,231	323,252,648	-6.1%

**The dash does not represent the absence of dispensations in previous years, rather, it signifies the medication was not in the top 20 previously.*

Dispensed by County

The database was queried by Minnesota County based on the address the recipient provided to the dispenser. Notably, data in the database is as reliable and accurate as the reporting dispenser's records. Hennepin County, with the largest population, had the greatest volume of reported prescriptions in 2020. A correlation was noted between the population of the county and the quantity of prescriptions dispensed for the top seven counties. According to [Vintage 2020 population estimates made available by the U.S. Census Bureau for 2020](#), the top ten counties in Minnesota by population were: Hennepin (1,268,408); Ramsey (547,903); Dakota (431,807); Anoka (359,921); Washington (265,476); St. Louis (198,538); Stearns (162,038); Olmsted (159,298); Scott (150,689); and Wright (140,249). ⁽¹⁾ Figure 1 shows the top ten recipient residence counties based on the number of prescriptions reported as dispensed.

Figure 1. Top Ten Minnesota Recipient Counties by Prescription Count

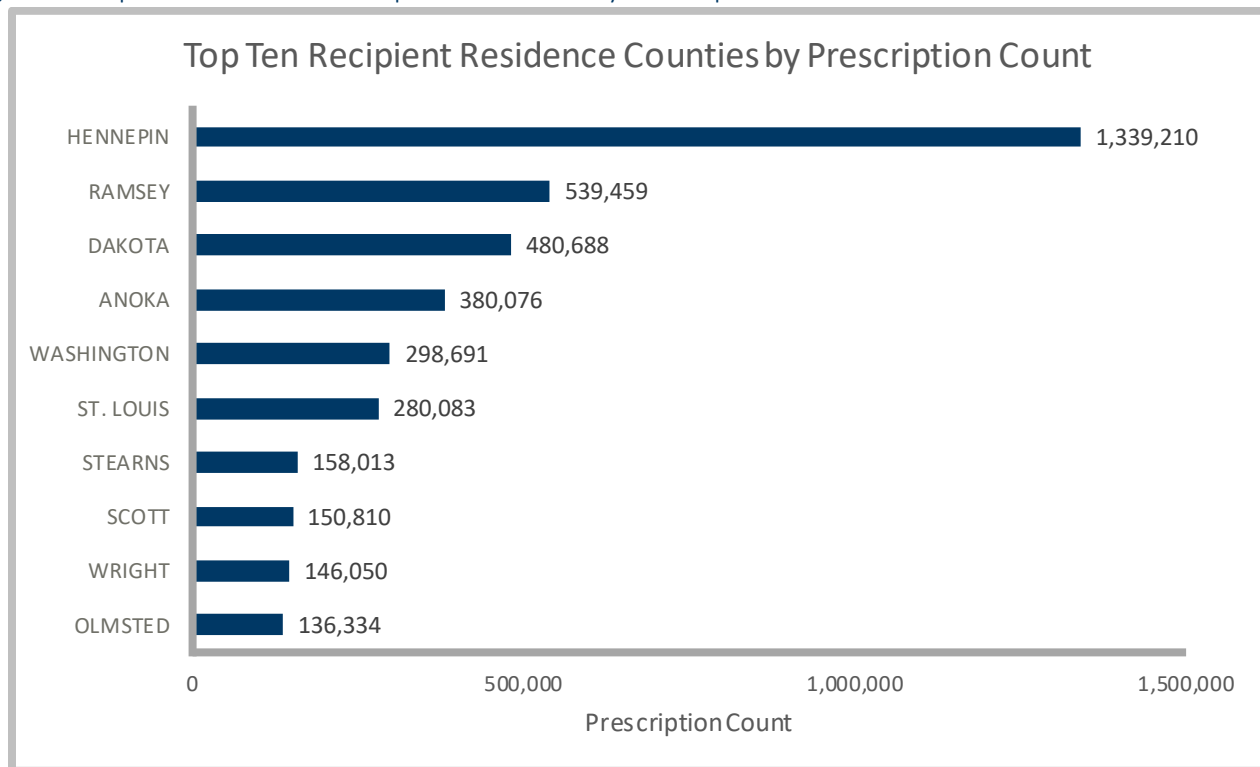


Table 2 shows the total number of controlled substance prescriptions reported as dispensed based on recipient residence county in 2020, as well as the county's corresponding population for 2020 according to Vintage 2020 population estimates made available by the U.S. Census Bureau as of the date of this publication. When assessing the crude rate, the county with the highest rate of prescriptions dispensed was Mille Lacs County with 2,014.7 prescriptions per 1,000 population. ⁽¹⁾ The county with the lowest rate of prescriptions dispensed was Houston County with 623.1 prescriptions per 1,000 population. The state crude rate was 1,104.2 prescriptions per 1,000 population (prescriptions reported as dispensed to recipients residing in all Minnesota Counties divided by the state population). The rates portrayed are regardless of age or whether Minnesota residents filled controlled substance prescriptions in 2020.

Table 2. Controlled Substance Prescriptions Dispensed by MN Recipient Residence Counties ⁽¹⁾

<i>Geography</i>	<i>2020 Population</i>	<i>2020 Rx Count</i>	<i>Rate per 1,000 residents</i>	<i>Geography</i>	<i>2020 Population</i>	<i>2020 Rx Count</i>	<i>Rate per 1,000 residents</i>	<i>Geography</i>	<i>2020 Population</i>	<i>2020 Rx Count</i>	<i>Rate per 1,000 residents</i>
MINNESOTA	5,657,342	6,246,924	1,104.2	HUBBARD	21,783	23,730	1,089.4	PINE	29,359	36,776	1,252.6
AITKIN	15,848	22,359	1,410.8	ISANTI	41,429	53,220	1,284.6	PIPESTONE	9,121	12,764	1,399.4
ANOKA	359,921	380,076	1,056.0	ITASCA	45,268	75,113	1,659.3	POLK	30,900	47,021	1,521.7
BECKER	34,456	38,705	1,123.3	JACKSON	9,768	11,223	1,149.0	POPE	11,277	14,616	1,296.1
BELTRAMI	47,442	60,520	1,275.7	KANABEC	16,416	22,705	1,383.1	RAMSEY	547,903	539,459	984.6
BENTON	40,958	36,489	890.9	KANDIYOHI	43,130	40,849	947.1	RED LAKE	4,046	5,631	1,391.7
BIG STONE	4,923	7,427	1,508.6	KITTSO	4,214	5,583	1,324.9	REDWOOD	15,079	16,270	1,079.0
BLUE EARTH	68,241	77,397	1,134.2	KOOCHICHING	12,059	21,637	1,794.3	RENVILLE	14,403	18,867	1,309.9
BROWN	24,846	30,535	1,229.0	LAC QUI PARLE	6,527	8,205	1,257.1	RICE	67,084	69,975	1,043.1
CARLTON	35,769	50,840	1,421.3	LAKE	10,639	13,896	1,306.1	ROCK	9,301	11,857	1,274.8
CARVER	106,565	107,981	1,013.3	LAKE OF THE WOODS	3,754	5,085	1,354.6	ROSEAU	15,117	21,115	1,396.8
CASS	29,928	41,208	1,376.9	LESUEUR	28,741	25,513	887.7	SAINT LOUIS	198,538	280,083	1,410.7
CHIPPEWA	11,758	11,827	1,005.9	LINCOLN	5,568	5,946	1,067.9	SCOTT	150,689	150,810	1,000.8
CHISAGO	56,794	78,027	1,373.9	LYON	25,271	26,792	1,060.2	SHERBURNE	98,811	131,990	1,335.8
CLAY	64,690	75,233	1,163.0	MAHNOMEN	5,473	10,081	1,842.0	SIBLEY	14,715	14,031	953.5
CLEARWATER	9,017	14,769	1,637.9	MARSHALL	9,321	10,734	1,151.6	STEARNS	162,038	158,013	975.2
COOK	5,417	4,336	800.4	MARTIN	19,484	26,898	1,380.5	STEELE	36,596	44,972	1,228.9
COTTONWOOD	11,242	14,757	1,312.7	MCLEOD	35,710	45,150	1,264.4	STEVENS	9,765	8,725	893.5
CROW WING	65,644	86,567	1,318.7	MEEKER	23,341	23,481	1,006.0	SWIFT	9,176	11,394	1,241.7
DAKOTA	431,807	480,688	1,113.2	MILLE LACS	26,146	52,676	2,014.7	TODD	24,732	24,707	999.0
DODGE	20,987	15,741	750.0	MORRISON	33,187	39,510	1,190.5	TRAVERSE	3,218	5,108	1,587.3
DOUGLAS	38,328	46,224	1,206.0	MOWER	40,150	34,860	868.2	WABASHA	21,642	25,357	1,171.7
FARIBAUT	13,601	18,932	1,392.0	MURRAY	8,155	9,169	1,124.3	WADENA	13,807	20,451	1,481.2
FILLMORE	21,135	18,555	877.9	NICOLLET	34,482	36,492	1,058.3	WASECA	18,550	21,090	1,136.9
FREEBORN	30,364	27,562	907.7	NOBLES	21,400	17,747	829.3	WASHINGTON	265,476	298,691	1,125.1
GOODHUE	46,318	54,513	1,176.9	NORMAN	6,338	7,583	1,196.4	WATONWAN	10,792	11,662	1,080.6
GRANT	6,026	8,359	1,387.2	OLMSTED	159,298	136,334	855.8	WILKIN	6,161	6,987	1,134.1
HENNEPIN	1,268,408	1,339,210	1,055.8	OTTER TAIL	58,741	69,145	1,177.1	WINONA	50,485	39,936	791.0
HOUSTON	18,632	11,610	623.1	PENNINGTON	13,874	20,182	1,454.7	WRIGHT	140,249	146,050	1,041.4
								YELLOW MEDICINE	9,580	12,530	1,307.9

Table 3 shows the number of controlled substance prescriptions dispensed to Minnesota recipients by federal schedule, as well as the average number of prescriptions per Minnesota resident, if every resident in the State of Minnesota were to receive one prescription. The rates portrayed are regardless of age or whether Minnesota residents filled controlled substance prescriptions.

Table 3. Prescription Count and Average of Federally Scheduled Prescriptions Dispensed per Population
(1)

Schedule	2015 RX Count to MN Recipient	2016 RX Count to MN Recipient	2017 RX Count to MN Recipient	2018 Rx Count to MN Recipient	2019 Rx Count to MN Recipient	2020 Rx Count to MN Recipient	% Change from 2019 to 2020	2015 RX per MN Pop*	2016 RX per MN Pop*	2017 RX per MN Pop*	2018 Rx per MN Pop*	2019 Rx per MN Pop*	2020 Rx per MN Pop*
II	4,175,975	3,979,145	3,769,747	3,530,644	3,398,208	3,256,567	-4.2%	0.76	0.72	0.68	0.63	0.60	0.58
III	362,155	350,644	353,906	364,983	387,291	402,880	4.0%	0.07	0.06	0.06	0.07	0.07	0.07
IV	2,998,574	2,863,538	2,701,854	2,547,523	2,419,586	2,303,823	-4.8%	0.55	0.52	0.49	0.45	0.43	0.41
V	332,237	353,238	358,713	328,002	315,811	283,654	-10.2%	0.06	0.06	0.06	0.06	0.06	0.05
Total	7,868,941	7,546,565	7,184,220	6,771,152	6,520,896	6,246,924	-4.2%	1.44	1.37	1.29	1.21	1.16	1.10

**Prescription count per MN Population is based on US Census Bureau population estimates, not on the number of recipients to receive controlled substances.*

Prescriptions Reported by Class

Opioids

In Minnesota, over 2.3 million opioid prescriptions were reported as dispensed in 2020 with hydrocodone/acetaminophen, oxycodone, and tramadol as the leading three. Table 4 shows the top twenty opiate agonists, as classified by the American Society of Health-System Pharmacists, AHFS® Pharmacologic-Therapeutic Classification© ⁽²⁾, reported by prescription count in 2020, as well as the number of prescriptions reported from 2016 to 2019. There was roughly a **9.1% reduction** in opioid prescriptions dispensed from 2019 to 2020.

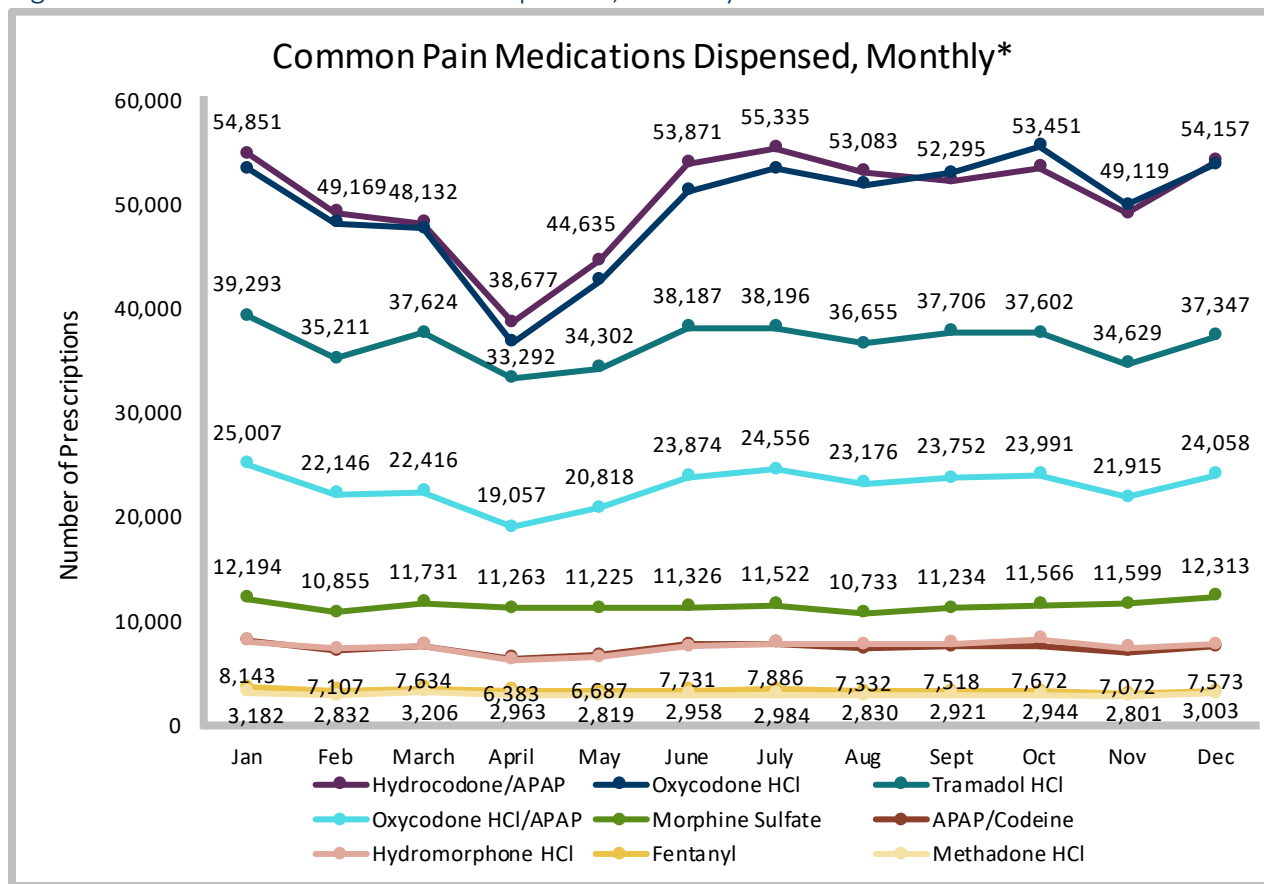
Table 4. Opioids Reported as Dispensed - 2020, Top Twenty

Drug	2016 Rx Count	2017 Rx Count	2018 Rx Count	2019 Rx Count	2020 Rx Count	% Change from '19 to '20
HYDROCODONE/ACETAMINOPHEN	1,083,646	941,526	793,538	693,354	606,775	-12.5%
OXYCODONE HCL	667,397	644,777	624,022	620,517	597,159	-3.8%
TRAMADOL HCL	621,430	571,762	520,448	489,491	440,044	-10.1%
OXYCODONE HCL/ACETAMINOPHEN	543,330	462,137	374,178	315,714	274,766	-13.0%
MORPHINE SULFATE	186,121	175,660	155,514	143,047	137,561	-3.8%
HYDROMORPHONE HCL	94,048	95,986	91,479	92,299	90,365	-2.1%
ACETAMINOPHEN WITH CODEINE	160,251	139,125	118,303	101,096	88,738	-12.2%
FENTANYL	86,799	72,866	59,365	48,807	40,234	-17.6%
METHADONE HCL	50,288	46,284	42,245	38,558	35,443	-8.1%
OXYCODONE MYRISTATE*	164	707	1,452	2,523	3,635	44.1%
TRAMADOL HCL/ACETAMINOPHEN	8,181	6,340	4,813	3,702	3,020	-18.4%
CODEINE SULFATE	4,104	3,446	3,301	2,876	2,603	-9.5%
BUTALBIT/ACETAMIN/CAFF/CODEINE	4,058	3,428	3,313	2,976	2,481	-16.6%
CODEINE/BUTALBITAL/ASA/CAFFEIN	4,069	3,371	2,876	2,564	2,373	-7.4%
TAPENTADOL HCL	2,848	2,595	2,185	1,963	1,733	-11.7%
HYDROCODONE/IBUPROFEN	4,886	3,508	2,602	1,945	1,608	-17.3%
HYDROMORPHONE HCL/PF	801	1,116	988	1,457	850	-41.7%
HYDROCODONE BITARTRATE	1,163	1,046	967	832	802	-3.6%
OXYMORPHONE HCL	2,032	1,545	819	796	665	-16.5%
OPIUM/BELLADONNA ALKALOIDS	1,012	832	634	692	565	-18.4%
TOTAL	3,528,948	3,180,131	2,804,918	2,566,497	2,332,204	-9.1%

*XTAMPZA ER® is an extended-release formulation of oxycodone which was approved by the U.S. Food and Drug Administration (FDA) in 2016.

Figure 2 illustrates common pain medications reported as dispensed each month in 2020. Hydrocodone/acetaminophen was largely the number one opioid dispensed each month. The decrease observed, particularly in hydrocodone/acetaminophen and oxycodone HCl in the spring of 2020, coincides with the timing of the characterization of the COVID-19 outbreak as a pandemic by the World Health Organization, the national emergency declaration issued by the President, and the Executive Orders issued in Minnesota (e.g. Emergency Executive Order 20-09 Directing Delay of Inpatient and Outpatient Elective Surgery and Procedural Cases during COVID-19 Peacetime Emergency, Emergency Executive Order 20-20 Directing Minnesotans to Stay at Home).⁽³⁾ See Appendix A for additional monthly opioid trends for calendar years 2019 and 2020.

Figure 2. Common Pain Medications Dispensed, Monthly - 2020



*Classified as opiate agonists by AHFS® Pharmacologic-Therapeutic Classification® (2)

Tables 5a and 5b show the crude rate of opioid prescriptions, by prescription type, per 1,000 population. For every 1,000 Minnesota residents, regardless of age or whether they had any prescriptions filled, there were **397.7** opioid prescriptions reported. The crude rate is based on prescriptions reported per recipient residence county and the county's population, per U.S. Census Bureau 2020 Vintage population estimates⁽¹⁾.

The rate is shown for the full calendar year and is portrayed by county and statewide. The prescription types included in Table 5a consist of a subset of opiate agonists as categorized by AHFS® classification⁽²⁾. Table 5b shows the number of opioid prescriptions reported as dispensed from 2016-2020 per Minnesota recipient residence county.

Table 5a. Crude Rate of Opioids Dispensed per 1,000 Population by MN Recipient Residence County ^{(1)*}

** The rates portrayed are regardless of age or whether Minnesota residents filled controlled substance prescriptions. Rates were calculated using US Census Bureau population estimates.*

COUNTY	All Opioid Rate	Hydrocodone Rate	Oxycodone Rate	Tramadol Rate	Codeine Rate	Morphine Rate	Fentanyl Rate	Hydromorphone Rate
STATEWIDE	397.7	104.4	148.5	75.5	16.6	23.7	7.0	15.5
AITKIN	744.5	215.4	298.6	107.3	24.3	54.3	18.0	20.8
ANOKA	395.1	97.4	172.1	60.9	16.1	21.5	4.6	15.5
BECKER	415.9	167.3	96.6	73.7	19.4	34.1	6.1	11.5
BELTRAMI	457.5	137.3	93.9	159.1	24.5	23.0	6.4	7.6
BENTON	344.7	93.1	119.7	67.8	15.2	30.5	6.7	8.0
BIG STONE	617.9	225.1	101.0	180.6	52.0	37.0	11.8	4.1
BLUE EARTH	369.3	81.5	128.4	95.8	13.9	17.2	7.8	20.4
BROWN	455.2	126.7	148.8	102.8	15.4	31.1	15.0	8.9
CARLTON	614.2	233.0	141.9	139.6	22.7	37.7	11.0	16.0
CARVER	308.7	105.3	98.9	57.3	14.1	12.9	3.7	13.0
CASS	562.1	197.7	150.5	119.2	27.1	33.2	10.2	15.9
CHIPPEWA	390.6	115.9	98.2	113.2	18.7	28.1	8.2	6.3
CHISAGO	581.7	138.6	252.9	88.9	18.6	38.0	14.4	21.3
CLAY	316.4	111.0	86.0	72.2	11.1	17.5	5.6	8.8
CLEARWATER	679.8	224.8	151.3	202.1	42.7	22.8	20.2	12.0
COOK	359.8	125.9	108.0	69.0	15.7	20.1	10.7	7.4
COTTONWOOD	491.3	130.8	88.5	174.9	25.2	21.6	36.7	5.0
CROW WING	497.0	162.8	175.7	82.0	20.6	32.2	10.0	8.1
DAKOTA	376.3	93.1	156.2	61.7	16.4	19.6	5.6	15.5
DODGE	247.8	37.7	95.5	64.8	9.7	13.2	2.3	22.3
DOUGLAS	446.8	134.5	131.0	111.1	16.5	36.1	9.1	5.6
FARIBAULT	609.7	172.2	167.0	174.4	20.1	47.9	10.4	13.8
FILLMORE	360.3	75.4	106.6	126.5	11.3	13.8	9.6	14.5
FREEBORN	355.9	77.1	107.4	115.1	9.1	21.4	6.2	14.6
GOODHUE	475.7	93.3	179.9	111.3	17.3	34.2	11.9	21.6
GRANT	517.3	152.3	181.2	112.8	22.1	29.0	6.0	11.1
HENNEPIN	338.6	76.8	148.7	49.5	14.5	22.3	4.0	17.0
HOUSTON	245.1	85.4	49.3	76.6	5.6	17.2	6.8	2.3
HUBBARD	430.4	132.9	118.0	95.7	20.8	35.5	8.2	14.4
ISANTI	537.0	140.3	241.7	67.4	21.4	29.6	11.1	15.6
ITASCA	640.8	190.8	197.4	138.8	32.3	28.7	8.1	31.2
JACKSON	368.9	120.0	61.3	148.9	12.0	21.3	0.8	4.3
KANABEC	671.7	162.8	320.7	69.2	19.7	54.3	20.4	15.8
KANDIYOHI	342.0	102.6	82.5	93.5	23.5	20.8	8.9	5.9
KITTSOON	514.7	116.0	125.8	160.2	31.3	31.8	41.5	5.5
KOOCHICHING	683.5	212.5	174.7	185.1	32.3	41.3	12.4	17.0
LAC QUI PARLE	568.6	187.4	117.8	164.2	12.1	33.1	36.2	14.4
LAKE	578.5	198.8	147.2	113.6	24.4	39.9	12.2	22.5

<i>COUNTY</i>	<i>All Opioid Rate</i>	<i>Hydrocodone Rate</i>	<i>Oxycodone Rate</i>	<i>Tramadol Rate</i>	<i>Codeine Rate</i>	<i>Morphine Rate</i>	<i>Fentanyl Rate</i>	<i>Hydromorphone Rate</i>
STATEWIDE	397.7	104.4	148.5	75.5	16.6	23.7	7.0	15.5
LAKE OF THE WOODS	707.2	243.5	158.8	209.9	25.3	22.9	30.6	9.3
LE SUEUR	359.2	87.8	130.6	91.2	10.9	11.1	5.6	17.4
LINCOLN	432.1	115.7	56.4	163.1	20.3	34.3	31.1	6.6
LYON	391.1	129.7	62.6	119.5	16.9	28.9	23.4	5.0
MAHNOMEN	575.2	241.2	130.8	114.7	31.8	18.1	13.5	20.3
MARSHALL	437.3	123.7	108.0	128.3	23.0	20.3	23.6	4.2
MARTIN	527.4	154.7	142.6	149.4	18.4	23.3	14.9	20.4
MCLEOD	499.7	149.6	154.7	101.5	19.7	35.7	11.1	15.3
MEEKER	442.8	123.9	136.4	96.6	13.1	39.0	15.0	9.9
MILLE LACS	897.9	253.7	378.9	124.9	30.3	51.9	11.4	29.2
MORRISON	535.9	186.1	154.4	114.8	22.9	36.1	11.1	5.4
MOWER	281.9	55.4	104.1	79.8	5.9	17.6	5.0	11.5
MURRAY	414.6	120.9	68.7	159.2	13.9	23.9	19.6	5.6
NICOLLET	318.9	83.0	96.3	91.6	11.9	11.7	5.5	15.0
NOBLES	305.7	106.5	42.8	109.1	14.6	22.7	6.6	1.5
NORMAN	369.0	117.1	85.7	105.1	15.0	34.9	0.8	5.5
OLMSTED	279.7	41.1	104.3	77.6	8.3	14.8	5.3	25.7
OTTER TAIL	453.6	145.4	127.1	110.5	20.6	28.1	8.5	9.3
PENNINGTON	526.9	157.9	134.4	144.3	35.2	28.9	13.1	4.8
PINE	638.9	185.6	246.8	97.1	16.4	50.2	13.5	18.4
PIPESTONE	519.5	169.6	114.6	139.5	28.5	37.1	19.3	7.9
POLK	546.8	161.4	160.8	124.2	28.8	33.2	25.1	6.3
POPE	527.5	143.1	158.1	128.6	15.2	35.2	32.1	6.9
RAMSEY	365.4	77.3	163.5	55.5	18.4	20.0	4.8	18.0
RED LAKE	526.2	160.4	139.9	147.8	36.1	28.2	7.2	3.7
REDWOOD	434.6	138.3	104.4	118.7	12.1	23.9	20.7	8.0
RENVILLE	518.5	186.1	138.2	119.0	34.1	19.3	11.7	5.6
RICE	396.3	102.1	152.7	82.5	11.4	26.7	6.4	9.9
ROCK	564.1	189.8	116.1	173.0	16.9	27.3	28.3	1.1
ROSEAU	539.6	145.3	140.5	145.2	36.2	30.3	26.0	6.6
SAINT LOUIS	516.5	181.1	138.5	102.1	16.7	27.1	9.1	27.4
SCOTT	345.7	92.3	139.2	56.8	14.1	17.3	4.8	15.4
SHERBURNE	496.6	133.4	203.4	82.8	17.5	32.1	7.1	13.5
SIBLEY	389.3	124.0	126.0	83.0	15.6	18.1	5.6	9.7
STEARNS	376.8	105.6	117.7	89.8	16.3	27.3	9.4	6.1
STEELE	364.3	93.6	123.3	97.3	11.1	20.5	4.9	11.0
STEVENS	332.4	115.4	97.1	79.9	14.3	16.2	3.5	4.1
SWIFT	485.9	145.9	146.3	112.0	22.8	30.1	9.9	16.0
TODD	469.1	166.3	131.4	96.1	21.1	32.9	11.6	3.6
TRAVERSE	615.9	247.0	120.0	145.7	36.7	32.0	26.1	1.2
WABASHA	483.2	89.9	146.9	162.2	11.8	28.1	15.9	26.5

COUNTY	All Opioid Rate	Hydrocodone Rate	Oxycodone Rate	Tramadol Rate	Codeine Rate	Morphine Rate	Fentanyl Rate	Hydromorphone Rate
STATEWIDE	397.7	104.4	148.5	75.5	16.6	23.7	7.0	15.5
WADENA	636.2	228.9	169.5	130.6	28.5	35.6	27.5	9.2
WASECA	384.8	81.1	141.3	104.5	10.9	18.8	5.4	19.8
WASHINGTON	397.9	93.5	171.6	60.7	18.3	22.0	5.5	17.9
WATONWAN	466.5	123.6	152.1	134.5	11.6	14.5	7.0	17.0
WILKIN	411.6	150.8	79.0	103.1	27.8	28.7	12.2	9.1
WINONA	343.3	89.9	100.4	98.4	10.4	22.1	9.6	7.6
WRIGHT	382.1	111.5	152.1	58.5	14.5	24.3	5.8	9.6
YELLOW MEDICINE	608.0	168.5	97.5	209.4	29.6	49.3	31.7	11.3

Table 5b. Opioid Prescriptions Dispensed by Minnesota Recipient Residence Counties ^{(1)*}

Geography	Prescription Count					Rate per 1,000 Population*				
	Count 2016	Count 2017	Count 2018	Count 2019	Count 2020	Rate 2016	Rate 2017	Rate 2018	Rate 2019	Rate 2020
MINNESOTA	3,400,302	3,062,960	2,704,445	2,472,684	2,250,190	615.6	550.1	482.0	438.4	397.7
AITKIN	19,158	16,812	14,459	13,398	11,799	1,215.80	1,063.40	909.3	843.4	744.5
ANOKA	220,391	195,527	172,349	156,142	142,217	635.7	557.8	487.1	437.5	395.1
BECKER	22,989	19,836	17,588	15,576	14,330	681.8	582.1	511.7	452.5	415.9
BELTRAMI	34,338	28,862	25,073	22,533	21,703	746.2	620.9	535.2	477.5	457.5
BENTON	21,080	18,587	17,575	16,569	14,119	531.4	463.2	433.5	405.2	344.7
BIG STONE	3,902	3,889	3,526	3,199	3,042	780.1	776.1	706.8	641.0	617.9
BLUE EARTH	35,151	31,480	28,062	26,252	25,199	529.8	470.6	416.2	388.0	369.3
BROWN	15,894	14,349	12,202	11,576	11,310	629.2	570	485.9	462.9	455.2
CARLTON	31,636	28,576	25,853	27,893	21,971	889.8	804.2	721.4	777.6	614.2
CARVER	48,129	43,526	39,704	36,289	32,894	479.5	426.1	383.4	345.3	308.7
CASS	26,456	22,289	19,154	17,763	16,822	911.8	759.8	648.9	596.5	562.1
CHIPPEWA	8,029	6,932	6,051	5,261	4,593	666.9	579.7	507.5	445.8	390.6
CHISAGO	46,890	42,870	38,980	35,634	33,039	859	776.4	697.0	629.8	581.7
CLAY	33,409	28,785	23,822	21,404	20,465	530.4	452	372.5	333.3	316.4
CLEARWATER	8,675	7,269	6,181	6,076	6,130	982.4	822.6	701.6	689.0	679.8
COOK	3,718	3,145	2,791	2,293	1,949	700.3	584.1	517.5	419.7	359.8
COTTONWOOD	8,442	8,049	7,340	6,419	5,523	742.1	713.8	650.9	573.3	491.3
CROW WING	49,479	44,782	40,455	36,490	32,628	776.3	696.3	623.4	560.9	497.0
DAKOTA	236,023	216,132	191,514	174,978	162,498	565	512.4	450.2	407.9	376.3
DODGE	8,108	7,104	6,343	5,572	5,200	394.5	342.6	304.6	266.2	247.8
DOUGLAS	30,624	28,094	22,364	21,723	17,124	824.4	748.1	589.1	569.5	446.8
FARIBAULT	11,831	10,578	9,214	8,613	8,293	853.1	768.5	669.7	630.9	609.7
FILLMORE	12,246	11,244	9,447	8,332	7,615	585.9	535.9	448.6	395.5	360.3
FREEBORN	17,344	16,029	13,956	12,174	10,806	570.4	524.9	458.4	402.0	355.9
GOODHUE	34,270	31,362	27,464	24,063	22,034	740.9	676.9	591.9	519.3	475.7
GRANT	4,946	4,452	3,752	3,445	3,117	833.6	749.7	623.2	576.9	517.3
HENNEPIN	662,001	594,333	521,074	476,213	429,490	535.7	476.1	413.7	376.2	338.6
HOUSTON	6,501	6,463	5,412	5,517	4,567	347.8	346.3	291.3	296.6	245.1
HUBBARD	13,323	11,876	10,320	9,896	9,376	643.6	565.5	483.8	460.5	430.4
ISANTI	34,459	30,960	27,546	24,686	22,246	888.6	782.2	689.2	608.1	537.0

Geography	Prescription Count					Rate per 1,000 Population*				
	Count 2016	Count 2017	Count 2018	Count 2019	Count 2020	Rate 2016	Rate 2017	Rate 2018	Rate 2019	Rate 2020
MINNESOTA	3,400,302	3,062,960	2,704,445	2,472,684	2,250,190	615.6	550.1	482.0	438.4	397.7
ITASCA	39,986	36,326	32,844	30,136	29,008	885.4	804.4	728.1	667.8	640.8
JACKSON	4,373	4,052	4,183	3,654	3,603	438.7	405.7	422.1	371.1	368.9
KANABEC	17,285	15,399	13,554	12,400	11,026	1,086.90	959.2	836.3	759.0	671.7
KANDIYOHI	24,276	22,771	19,602	16,937	14,750	569.4	533.1	457.4	392.1	342.0
KITTSOON	3,279	2,821	2,506	2,331	2,169	759.7	662.4	589.9	542.3	514.7
KOOCHICHING	12,332	10,715	9,327	8,843	8,242	978	855.4	749.8	723.1	683.5
LAC QUI PARLE	5,145	4,751	4,314	4,019	3,711	763.7	709.6	647.9	606.8	568.6
LAKE	8,743	7,915	7,105	6,877	6,155	830.8	752.7	666.6	646.3	578.5
LAKE OF THE WOODS	3,009	2,857	2,766	1,918	2,655	793.9	764.7	736.0	512.8	707.2
LE SUEUR	14,428	12,746	11,503	10,697	10,325	520.5	452.8	403.7	370.3	359.2
LINCOLN	3,236	3,333	3,051	2,828	2,406	567.3	586.6	537.8	501.5	432.1
LYON	13,424	12,258	11,392	10,666	9,883	516.3	472.3	444.5	418.7	391.1
MAHNOTMEN	5,756	4,452	3,775	3,238	3,148	1,048.50	798	684.0	585.9	575.2
MARSHALL	6,103	5,420	4,862	4,278	4,076	651.3	578.5	517.8	458.2	437.3
MARTIN	15,171	14,131	11,982	11,050	10,276	762.3	711.6	605.6	561.4	527.4
MCLEOD	25,684	23,911	21,293	19,356	17,843	718.1	666.4	593.6	539.3	499.7
MEEKER	15,609	14,156	12,482	11,585	10,335	677.1	614.4	539.4	498.9	442.8
MILLE LACS	35,943	31,812	27,833	25,008	23,477	1,405.00	1,229.40	1,064.8	951.7	897.9
MORRISON	26,161	23,406	21,044	19,198	17,786	795	707.1	634.4	575.0	535.9
MOWER	24,117	20,525	15,167	13,027	11,319	611	517	379.1	325.2	281.9
MURRAY	4,915	4,707	4,080	3,752	3,381	591.6	563.5	493.0	457.9	414.6
NICOLLET	16,266	14,693	12,708	11,820	10,995	482.2	431.4	371.4	344.9	318.9
NOBLES	9,777	8,546	7,305	6,798	6,541	445.2	391.8	333.2	314.3	305.7
NORMAN	4,581	3,717	2,700	2,560	2,339	701.6	564.5	417.0	401.6	369.0
OLMSTED	64,499	57,942	50,920	48,101	44,550	421.2	375	325.8	303.9	279.7
OTTER TAIL	41,368	37,548	32,647	28,987	26,647	714.9	644.6	555.1	493.4	453.6
PENNINGTON	11,516	10,595	8,337	7,569	7,310	810.6	746.6	588.0	536.1	526.9
PINE	27,767	24,378	21,989	20,138	18,757	962.2	835.3	745.8	680.8	638.9
PIPESTONE	7,214	7,084	6,881	5,823	4,738	784.7	778.8	760.6	638.1	519.5
POLK	23,925	21,477	19,083	18,328	16,897	754.3	677.4	605.3	584.4	546.8
POPE	8,700	7,842	7,050	6,381	5,949	793.6	713.9	635.3	567.3	527.5
RAMSEY	317,360	287,271	250,394	225,714	200,208	585.6	526.6	455.1	410.1	365.4
RED LAKE	2,858	2,782	2,413	2,247	2,129	716.3	691.7	603.4	554.1	526.2
REDWOOD	9,719	8,549	7,285	6,815	6,553	639	560.8	477.7	449.2	434.6
RENVILLE	10,795	10,060	8,967	7,682	7,468	739.2	685.9	613.7	528.0	518.5
RICE	40,961	36,591	32,957	29,475	26,585	622.3	553	495.4	440.1	396.3
ROCK	6,533	6,208	6,029	5,913	5,247	696.3	656.7	640.4	634.8	564.1
ROSEAU	10,622	10,302	9,379	8,986	8,157	682.9	672.8	619.1	592.5	539.6
ST. LOUIS	149,909	134,453	121,778	112,247	102,552	749.8	672.9	609.6	563.9	516.5
SCOTT	73,457	68,269	59,922	56,668	52,092	512.5	468.9	406.6	380.3	345.7
SHERBURNE	70,511	63,929	57,378	53,523	49,068	756	676.2	597.5	550.4	496.6
SIBLEY	9,294	8,037	7,405	6,932	5,729	627.3	539.3	492.7	466.3	389.3
STEARNS	89,738	80,682	73,929	68,583	61,064	571.6	510.7	464.2	425.8	376.8
STEELE	23,797	20,516	17,252	14,915	13,332	649.1	557.1	468.8	407.0	364.3
STEVENS	5,169	4,559	4,020	3,511	3,246	528.3	471.4	412.2	358.1	332.4

Geography	Prescription Count					Rate per 1,000 Population*				
	Count 2016	Count 2017	Count 2018	Count 2019	Count 2020	Rate 2016	Rate 2017	Rate 2018	Rate 2019	Rate 2020
MINNESOTA	3,400,302	3,062,960	2,704,445	2,472,684	2,250,190	615.6	550.1	482.0	438.4	397.7
SWIFT	6,458	5,883	5,012	4,884	4,459	683.6	626.1	536.3	527.1	485.9
TODD	18,725	16,203	14,874	12,878	11,602	767.8	660.5	605.1	522.1	469.1
TRAVERSE	2,749	2,583	2,144	2,029	1,982	827.3	781.1	648.1	622.6	615.9
WABASHA	14,651	13,637	12,272	11,297	10,457	683.8	631.6	567.0	522.4	483.2
WADENA	13,370	12,196	10,753	9,279	8,784	986.6	893.7	780.7	678.2	636.2
WASECA	10,904	9,779	8,616	7,447	7,138	580.6	522.2	461.0	400.1	384.8
WASHINGTON	152,806	141,311	127,235	115,689	105,632	604.8	552.7	490.9	440.8	397.9
WATONWAN	7,096	6,566	5,841	5,549	5,035	646.1	601.5	532.0	509.2	466.5
WILKIN	4,490	3,905	3,398	2,910	2,536	710.2	617.7	543.3	468.8	411.6
WINONA	27,231	23,664	21,183	18,874	17,329	535.6	466.7	416.8	373.9	343.3
WRIGHT	78,908	70,959	63,541	58,112	53,585	596.2	528.5	466.0	420.0	382.1
YELLOW MEDICINE	8,161	7,588	6,612	6,243	5,825	825.6	770.7	675.0	643.0	608.0

** The rates portrayed are regardless of age or whether Minnesota residents filled controlled substance prescriptions. Rates were calculated using US Census Bureau population estimates*

Partial Opiate Agonists

Partial opiate agonists are commonly used to treat pain or opioid dependence. The most frequent partial opiate agonist reported as dispensed in 2020 was buprenorphine/naloxone (i.e. Suboxone®, Bunavail®, Zubsolv®). Table 6 shows the number of partial opiate agonists reported as dispensed, by prescription count, in 2020 as well as the number of prescriptions reported from 2016 to 2019.

Table 6. Partial Opiate Agonists Reported as Dispensed (2020)

<i>Drug</i>	<i>2016 Rx Count</i>	<i>2017 Rx Count</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
BUPRENORPHINE HCL/NALOXONE HCL	66,275	81,924	103,484	131,556	149,179	13.4%
BUPRENORPHINE HCL	10,960	14,139	18,546	24,051	29,819	24.0%
BUPRENORPHINE	4,354	3,586	4,253	5,774	9,005	56.0%
BUTORPHANOL TARTRATE	1,966	1,831	1,649	1,554	1,461	-6.0%
PENTAZOCINE HCL/NALOXONE HCL	207	178	139	152	149	-2.0%
TOTAL	83,762	101,658	128,071	163,087	189,613	16.3%

Stimulants

The stimulants shown below, as categorized by the American Society of Health-System Pharmacists' AHFS® classifications, consist of anorexigenic agents and respiratory and central nervous system stimulants. ⁽²⁾ In 2020, the leading controlled substance stimulants reported were dextroamphetamine/amphetamine (i.e. Adderall®, Adderall XR®), methylphenidate HCl (i.e. Concerta®, Ritalin®, Metadate®, etc.) and lisdexamfetamine (i.e. Vyvanse®). The top ten stimulants reported as dispensed are shown in Table 7 as well as a comparison of prescriptions reported from 2016-2019.

Table 7. Stimulants Reported as Dispensed (2020, Top Ten)

<i>Drug</i>	<i>2016 Rx Count</i>	<i>2017 Rx Count</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
DEXTROAMPHETAMINE/AMPHETAMINE	743,478	793,503	840,861	878,209	911,153	3.8%
METHYLPHENIDATE HCL	408,175	412,915	415,519	420,416	402,216	-4.3%
LISDEXAMFETAMINE DIMESYLATE	160,238	162,435	159,220	168,015	178,525	6.3%
PHENTERMINE HCL	72,826	79,901	85,121	86,332	87,297	1.1%
DEXMETHYLPHENIDATE HCL	31,745	33,130	35,386	37,896	38,604	1.9%
MODAFINIL	26,585	28,422	30,891	32,526	32,990	1.4%
DEXTROAMPHETAMINE SULFATE	28,037	28,020	27,888	27,285	25,426	-6.8%
ARMODAFINIL	14,173	13,036	12,820	12,680	12,113	-4.5%
PHENTERMINE/TOPIRAMATE	2,701	2,968	3,010	3,074	3,208	4.4%
METHYLPHENIDATE	4,258	2,977	3,369	3,033	2,422	-20.1%
TOTAL	1,496,669	1,561,592	1,618,219	1,673,790	1,696,830	1.4%

Sedatives

The medications in the group of sedatives below consist of anxiolytics, sedatives, hypnotics, and miscellaneous as classified by AHFS® pharmacologic-therapeutic classification. ⁽²⁾ Of the controlled substances, zolpidem tartrate (i.e. Ambien®, Ambien CR®, etc.) was the leading sedative reported as dispensed. Table 8 provides an overview of the top five sedatives reported as dispensed, by prescription count, for the past five years.

Table 8. Sedatives Reported as Dispensed (2020, Top Five)

<i>Drug</i>	<i>2016 Rx Count</i>	<i>2017 Rx Count</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
ZOLPIDEM TARTRATE	478,685	444,673	414,568	380,826	356,095	-6.5%
ESZOPICLONE	49,014	49,953	52,031	51,937	53,071	2.2%
ZALEPLON	19,344	18,662	18,288	18,524	17,661	-4.7%
SUVOREXANT	5,716	6,242	7,205	6,966	7,261	4.2%
DICHLORALPHENAZONE*	—	—	—	—	270	—
TOTAL	553,246	519,888	492,453	458,692	434,667	-5.2%

Benzodiazepines

Benzodiazepines are medications that can have anticonvulsant, anxiolytic, hypnotic, muscle relaxant, and sedative properties. Over **1.3 million benzodiazepines** were reported as dispensed in 2020. The leading medications consist of lorazepam, clonazepam, and alprazolam. Table 9 shows the top ten benzodiazepines reported as dispensed, by prescription count in 2020, as well as the number of prescriptions reported from 2016 to 2019. There was roughly a **3.3% reduction** in benzodiazepines reported from 2019 to 2020.

Table 9. Benzodiazepines Reported as Dispensed (2020, Top Ten)

<i>Drug</i>	<i>2016 Rx Count</i>	<i>2017 Rx Count</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
LORAZEPAM	543,146	520,877	494,782	478,541	474,120	-0.9%
CLONAZEPAM	421,018	401,631	379,157	362,627	350,295	-3.4%
ALPRAZOLAM	356,298	334,016	315,011	297,718	288,861	-3.0%
DIAZEPAM	174,939	161,334	151,145	142,801	129,433	-9.4%
TEMAZEPAM	66,878	61,109	54,899	50,212	45,218	-9.9%
CLOBAZAM	5,590	6,392	7,016	7,641	8,365	9.5%
TRIAZOLAM	10,278	9,032	8,145	7,796	6,896	-11.5%
CLORAZEPATE DIPOTASSIUM	3,471	3,184	2,867	2,603	2,392	-8.1%
CHLORDIAZEPOXIDE HCL	2,718	2,392	2,107	2,131	2,065	-3.1%
OXAZEPAM	1,706	1,569	1,373	1,184	996	-15.9%
TOTAL	1,590,456	1,506,066	1,420,118	1,355,823	1,310,915	-3.3%

Muscle Relaxants

Of the centrally acting skeletal muscle relaxants, as categorized by AHFS® classification, carisoprodol is the only medication that is a controlled substance. ⁽²⁾ The number of carisoprodol-containing prescriptions that were reported to the MN PMP in 2020 are listed in Table 10 below as well as their corresponding counts from 2016 to 2019.

Table 10. Muscle Relaxants Reported as Dispensed (2020)

<i>Drug</i>	<i>2016 Rx Count</i>	<i>2017 Rx Count</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
CARISOPRODOL	22,466	18,390	15,688	13,842	12,713	-8.2%
CARISOPRODOL/ASPIRIN/CODEINE	13	12	10	<10	<10	—
CARISOPRODOL/ASPIRIN*	<10	0	0	0	0	n/a
TOTAL	22,484	18,402	15,698	13,846	12,716	-8.2%

Antitussives

Of the antitussives (or cough suppressants) categorized by AHFS® classification, hydrocodone and codeine are the only medications scheduled as controlled substances. ⁽²⁾ Table 11 shows the top five antitussives reported as dispensed, by prescription count, in the last five years.

Table 11. Antitussives Reported as Dispensed (2020, Top Five)

<i>Drug</i>	<i>2016 Rx Count</i>	<i>2017 Rx Count</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
CODEINE PHOSPHATE/GUAIFENESIN	165,859	163,763	127,316	110,009	57,440	-47.8%
PROMETHAZINE HCL/CODEINE	10,062	8,384	5,923	4,569	2,966	-35.1%
HYDROCODONE BIT/HOMATROP ME-BR	1,245	1,312	1,320	1,304	1,544	18.4%
HYDROCODONE/CHLORPHEN P-STIREX	2,432	1,870	1,333	1,114	772	-30.7%
PSEUDOEPHEDRINE HCL/CODEINE PHOSPHATE/GUAIFENESIN*	—	—	—	—	<10	—
TOTAL	179,845	175,524	136,008	117,026	62,731	-46.4%

**In 2020, pseudoephedrine HCl/codeine phosphate/guaifenesin was the 5th leading antitussive reported as dispensed. This replaced promethazine/phenylephrine HCl/codeine, which was previously the 5th leading antitussive based on 2019 prescription counts. The dash does not represent the absence of dispensations in previous years, rather, it signifies the medication was not in the top 5 previously.*

Gabapentinoids

Gabapentin (i.e. Neurontin®), gabapentin enacarbil (i.e. Horizant®), and pregabalin (i.e. Lyrica®) are often referred to as gabapentinoids. Table 12 displays prescription counts for these medications from 2018 and 2020.

Table 12. Gabapentinoids by Prescription Count*

<i>Drug</i>	<i>2018 Rx Count</i>	<i>2019 Rx Count</i>	<i>2020 Rx Count</i>	<i>% Change from '19 to '20</i>
GABAPENTIN	1,170,624	1,222,017	1,214,593	-0.6%
PREGABALIN	151,607	155,898	176,691	13.3%
GABAPENTIN ENACARBIL	838	1,112	2,889	159.8%

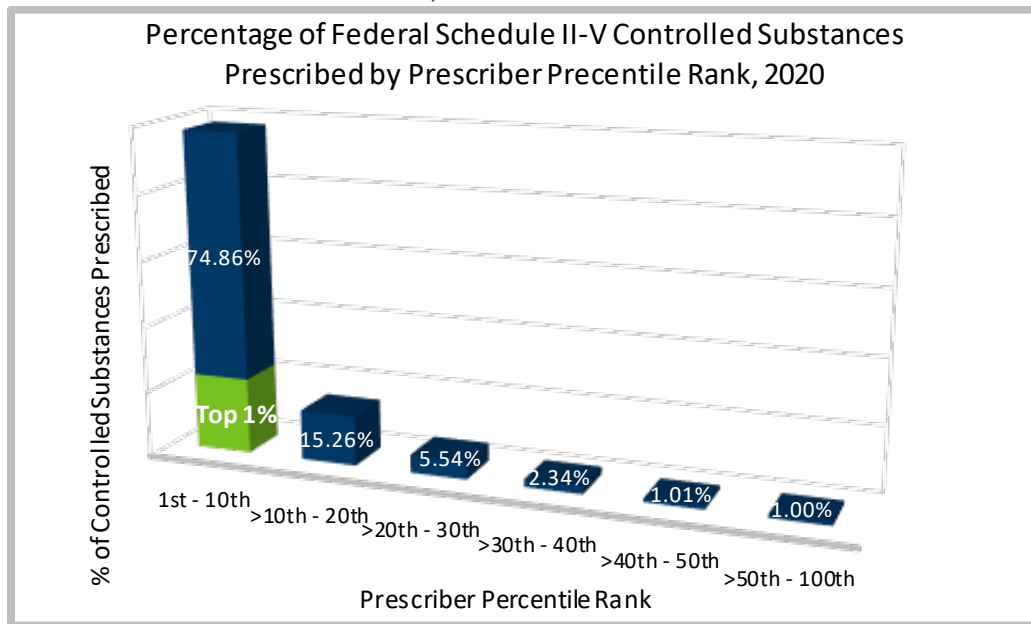
*Gabapentin is not a controlled substance in the State of Minnesota but must be reported to the MN PMP per [M.S. 152.126](#). Pregabalin is a schedule V controlled substance.

Key Findings – Prescribers and Recipients (2020)

Data from the PMP database was analyzed to identify the key findings noted below:

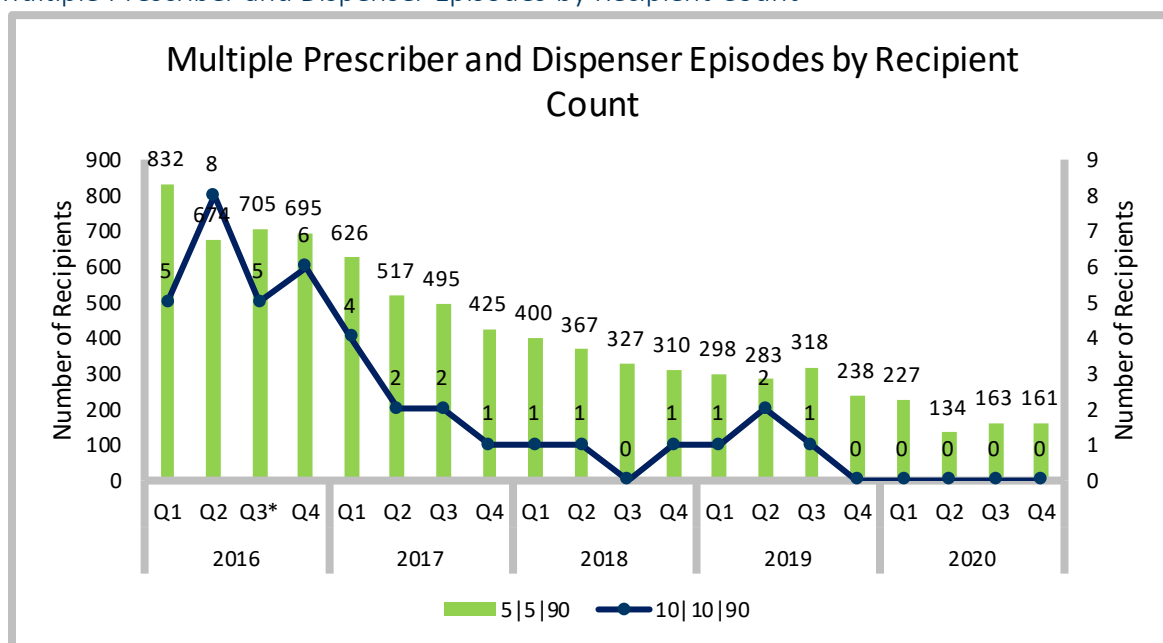
- The **top 500** prescribers prescribed **24.1%** of all controlled substance prescriptions reported as dispensed and **28.2%** of the total quantity reported as dispensed (units reported).
- Of the **top 100** prescribers of controlled substances reported, **89%** have requested and obtained access to the MN PMP.
- Figure 3 shows the percentage of schedule II-V controlled substance prescriptions written by prescribers by percentile ranking. This is based on unique and valid prescriber identifiers reported by dispensers. As such, if a prescriber has more than one Federal Drug Enforcement Administration (DEA) registration number, they may inadvertently be counted as more than one prescriber in the figure below.
 - Of note, the **top 1% of prescribers** contributed to **23.1%** of all schedule II-V controlled substances reported to the MN PMP.

Figure 3. Controlled Substances Prescribed by Prescriber Percentile Rank - 2020



- Figure 4 shows multiple prescriber and dispenser episodes from 2016 – 2020. The thresholds incorporated consist of 5/5/90 (5 prescribers or more plus 5 dispensers or more in 90 days) as well as 10/10/90 (10 prescribers or more plus 10 dispensers or more in 90 days). The assessment below includes all prescriptions reported to the database (i.e. butalbital and gabapentin). Of interest, in 2015, PMP staff began sending unsolicited notices to prescribers and dispensers regarding individuals with high-risk patient behavior, thereby alerting them to view the PMP and to discuss any concerns they may have with their patient.

Figure 4. Multiple Prescriber and Dispenser Episodes by Recipient Count



*In Q3 2016, the law changed requiring dispensers to report gabapentin to the PMP.

- 2020 marked the first year that prescribers began receiving PMP Prescriber Reports. The report is intended to give prescribers insight into their controlled substance prescribing patterns. PMP Prescriber Reports are electronically distributed on a quarterly basis to prescribers with an active PMP account, a defined role and specialty in their account, and have written at least one opioid, stimulant, or sedative prescription in the previous six months. The report is an aggregated view of prescribing as compared to peers, which is meant to serve as a point of reference. PMP Prescriber Reports are strictly informational and should not be used to impede the appropriate prescribing of controlled substances for legitimate medical purposes.

Table 13. Volume of MN PMP Prescriber Reports Distributed, by Quarter

Quarter and Year	Timeframe of PMP Prescriber Report	Volume of Active Users without an Rx for an Opioid, Sedative, or Stimulant*	Volume of PMP Prescriber Reports Distributed
Q1 2020	10/1/19-3/31/20	3,267	11,796
Q2 2020	1/1/20-6/30/20	3,875	12,269
Q3 2020	4/1/20-9/30/20	4,189	12,730
Q4 2020	7/1/20-12/31/20	4,297	13,531

*An "Active User without an Rx for an Opioid, Sedative, or Stimulant" represents a prescriber with an active PMP account, a defined role and specialty in their account, and no reported opioid, sedative, or stimulant during the six-month period.

DATABASE ACCOUNTS & ACCESS

The following sections cover PMP system account holders and their use of the PMP database. During the 2016 legislative session, [MN Stats. §152.126](#) was amended to require prescribers and pharmacists practicing within Minnesota to register for a PMP account. By July 1, 2017, every prescriber licensed by a MN health-licensing board practicing within this state who is authorized to prescribe controlled substances, for humans, and who holds a current registration issued by the federal Drug Enforcement Administration, and every pharmacist licensed by the Board and practicing within the state, must register for and maintain a user account with the MN PMP. While viewing this data, it is important to remember that it is unlikely that 100% of prescribers and pharmacists licensed in MN would meet the above qualifications and therefore be required to obtain access to the MN PMP. In 2020, estimates show that 39% of prescribing health care licensees and 51% of licensed pharmacists have requested and been approved for access to the PMP database. The remaining prescribers and licensed pharmacists may represent those licensed but not practicing in MN or whose practice does not warrant or allow for access to the PMP (e.g. no prescriber DEA registration).

Since the program began in 2010, there has been a steady increase in the number of individuals submitting applications and receiving approval to access the PMP database. 2017 showed an expected peak in applications and approvals due to the change in legislation. Additionally, in 2019, after migrating to the new software system, many accounts that had not been accessed in greater than 12 months were inactive and were purged. In an effort to remain compliant, these account holders reestablished accounts. Creating another peak in per day applicants. 2020 has evened out to represent newly licensed prescribers, pharmacists, and other eligible applicants requesting access. Table 14 shows the average number of approved applications for new accounts the PMP has received daily from 2016 to 2020.

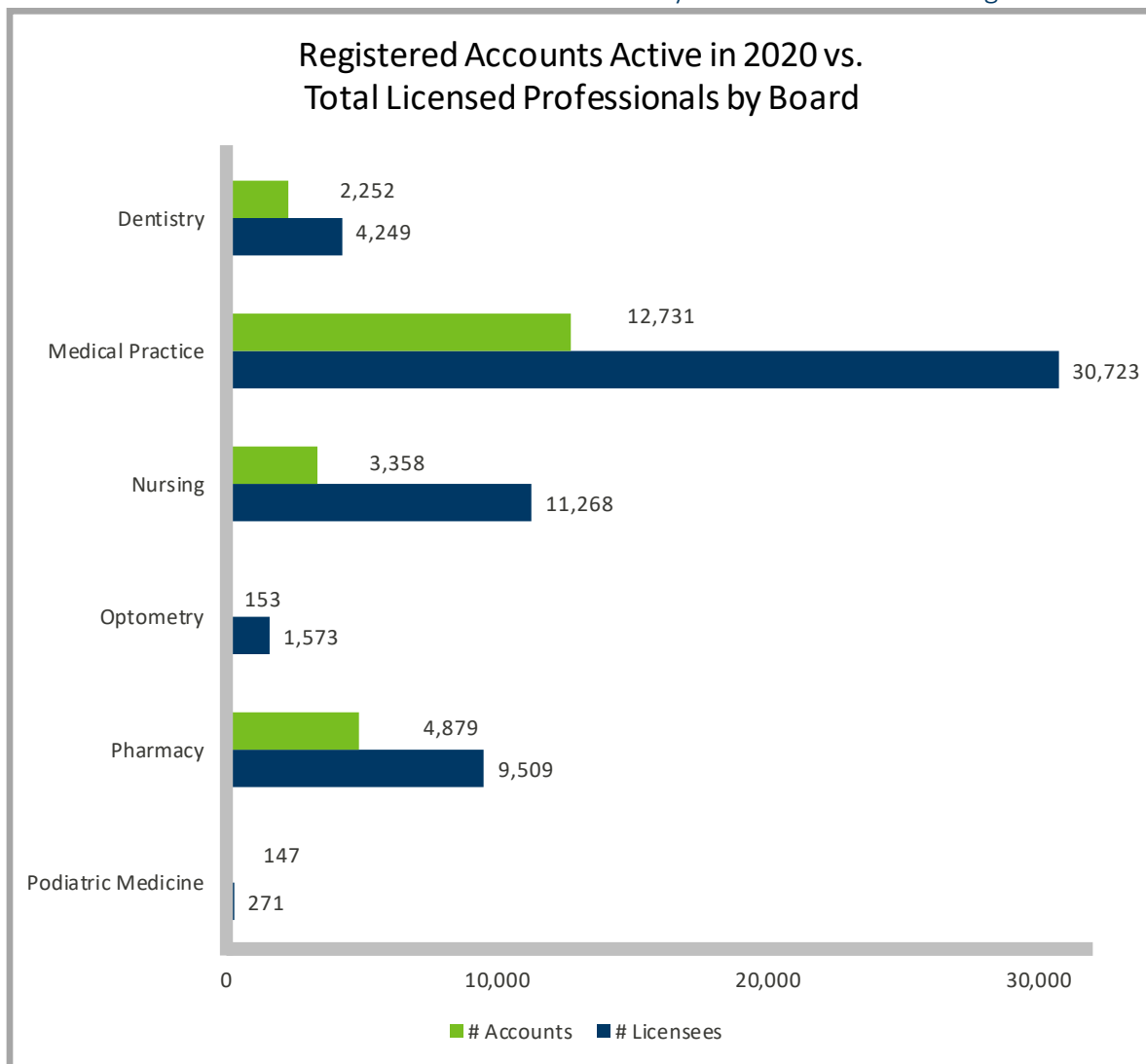
Table 14. Average Number of New Account Requests per Day

<i>Year</i>	<i>New Account Requests (Average)</i>
2016	21.5 per day
2017	46.3 per day
2018	14.4 per day
2019	20.4 per day
2020	14.2 per day

Prescribers and Pharmacists can request an account through the PMP online registration system. After verifying the individual has an active license to dispense or prescribe controlled substances and in the case of prescribers, has an active DEA registration number, the applicant may be granted access to the MN PMP. The green bar in Figure 5 shows the count of registered applicants that had an approved MN PMP account at any time during 2020, arranged by the board that licenses the individual. The dark blue bar shows the number of individuals that

were listed as licensed by that board at the end of 2020. Note: The number of prescribers includes all prescribers licensed by the various boards regardless of where they practice or if they have a DEA registration to prescribe controlled substances. There are licensees within these licensing boards that do not actively prescribe or treat patients (administrative positions, research, education, etc.). There are also individuals included in the total licensed professionals' column that are licensed in Minnesota but may practice in another state, are retired, or not practicing.

Figure 5. Account Holders vs. Total Licensed Professionals by Health-Related Licensing Boards - 2020



The role type of the active registered account holders is shown in Figure 6 with the highest percentage of registered accounts belonging to MD/DO/PAs and RPHs, which has been consistent since the program's inception.

Figure 6. System Accounts by Role Type - 2020

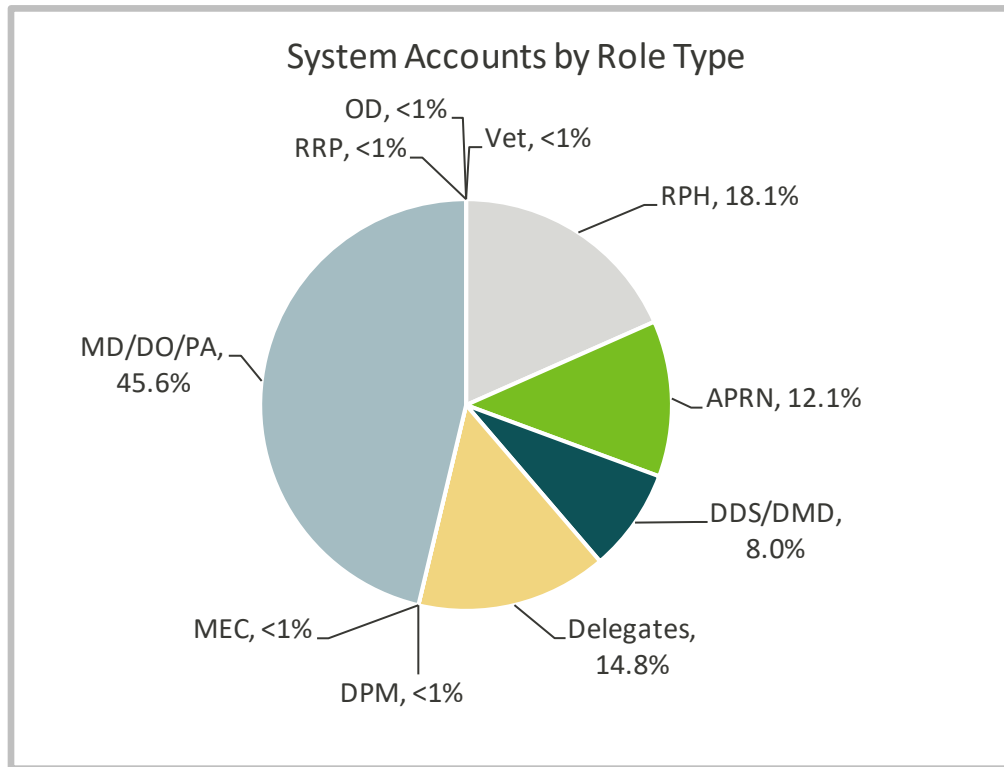


Figure 7 shows the total number of PMP searches performed during the past five years of operation. It also shows the number of individuals utilizing the database over time. 2020 shows a steady increase in account holders that are utilizing the database and a steep increase in PMP searches performed.

Figure 7. Total PMP Searches and Account Holders Performing Searches, 2016-2020

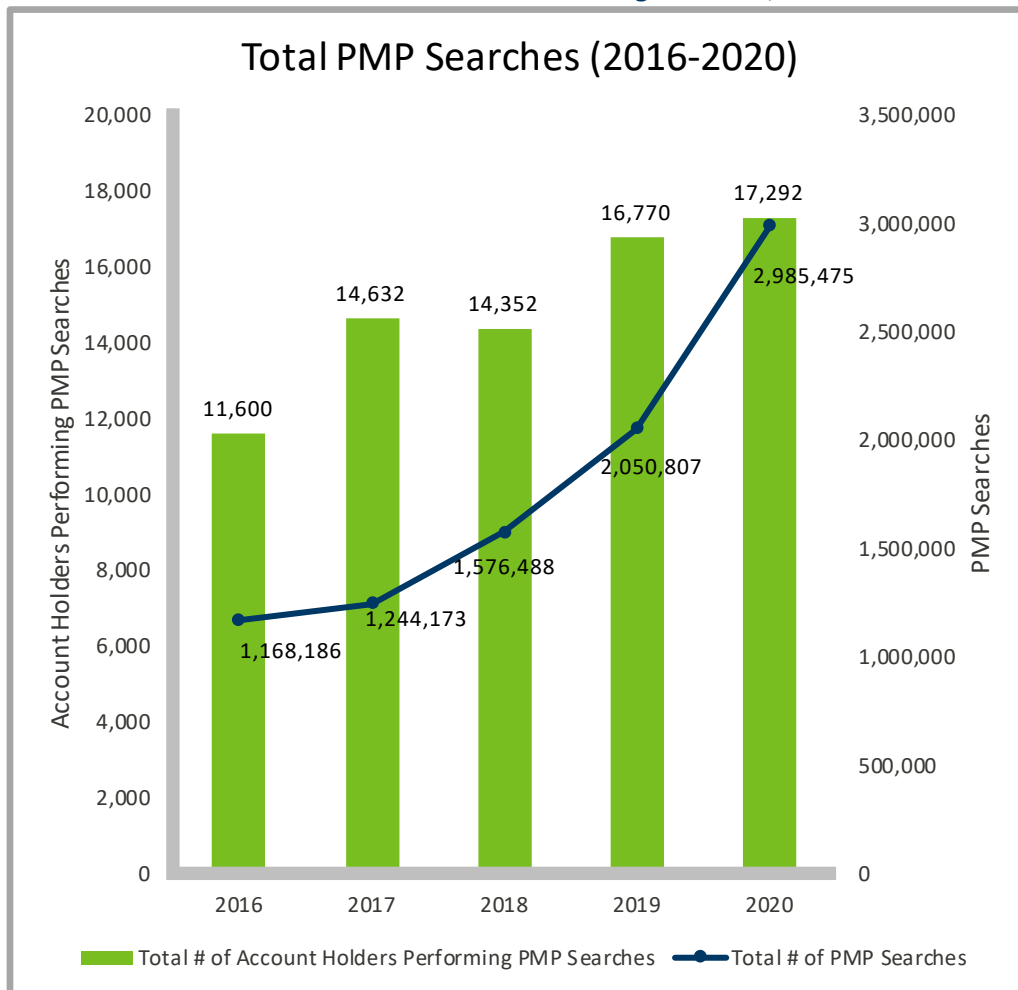
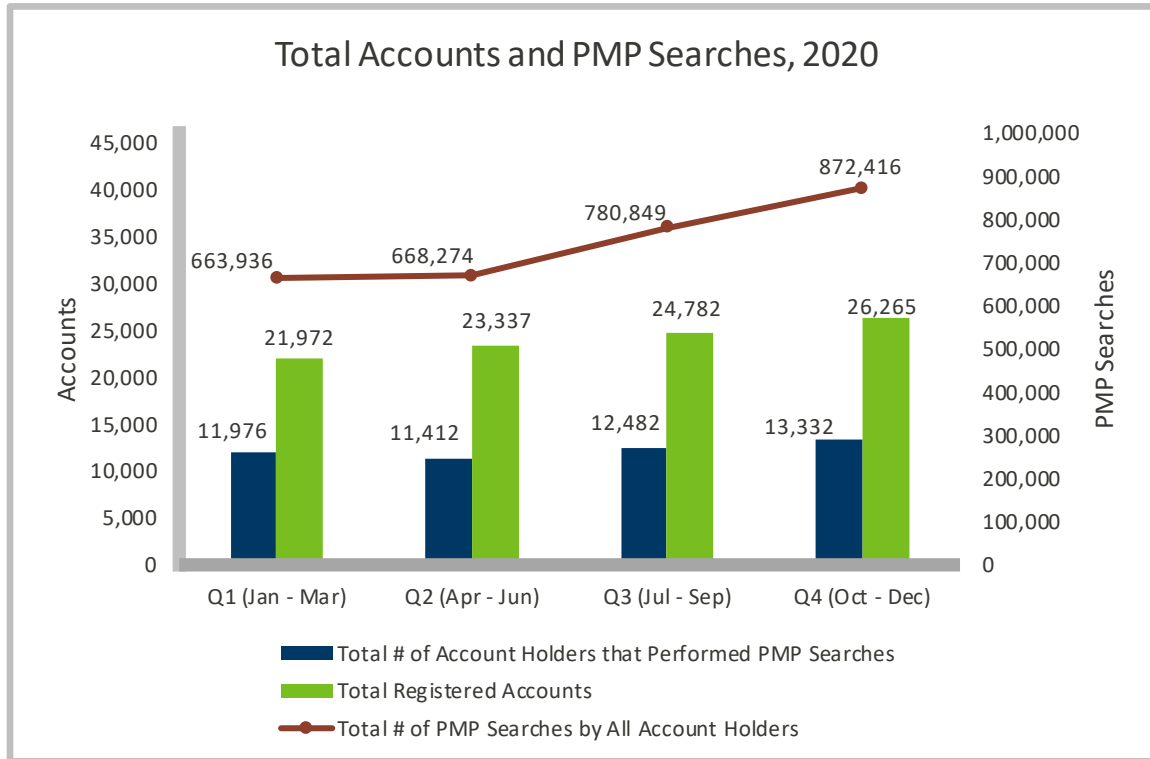


Figure 8 represents the quarterly utilization throughout 2020. It provides the number of registered account holders, the number of account holders that performed PMP searches during the timeframe, as well as the number of PMP searches performed during each quarter.

Figure 8. Total Accounts, Accounts Searching, and PMP Searches Performed - 2020



Methods of Viewing a Patient's MN PMP History Report

Web Portal Access

Figures 9a and 9b illustrate the number of PMP Searches by each PMP system role type throughout time via the PMP's web-portal. To access a PMP Search in this method, an authorized account holder (after applying for and being approved for an account) uses a browser of their choice to access the MN PMP AWARe system. They log in with their credentials, and perform a search entering their patient's demographic information. The system returns a view of the PMP history report within that same web portal.

Each prescriber and pharmacist role type shows a decrease for the first time in the past five years. This is reflective of the increase in availability of integrated one-click access to PMP searches within an EHR or PDS system, reducing the searches performed by logging into the web-portal. Medical Examiners and Coroners as well as Medicaid Restricted Recipient Program account holders have not enabled integrated one-click access at this time, so their web portal access to PMP searches continues to show an increase as it has in previous years. See [Appendix A](#) for total searches, including searches performed within an integrated system or on behalf of an account holder by an authorized delegate. Descriptions of acronyms can be found in [Key to Abbreviations](#).

Figure 9a. Searches Performed via PMP Web Portal by Role Type, 2016-2020

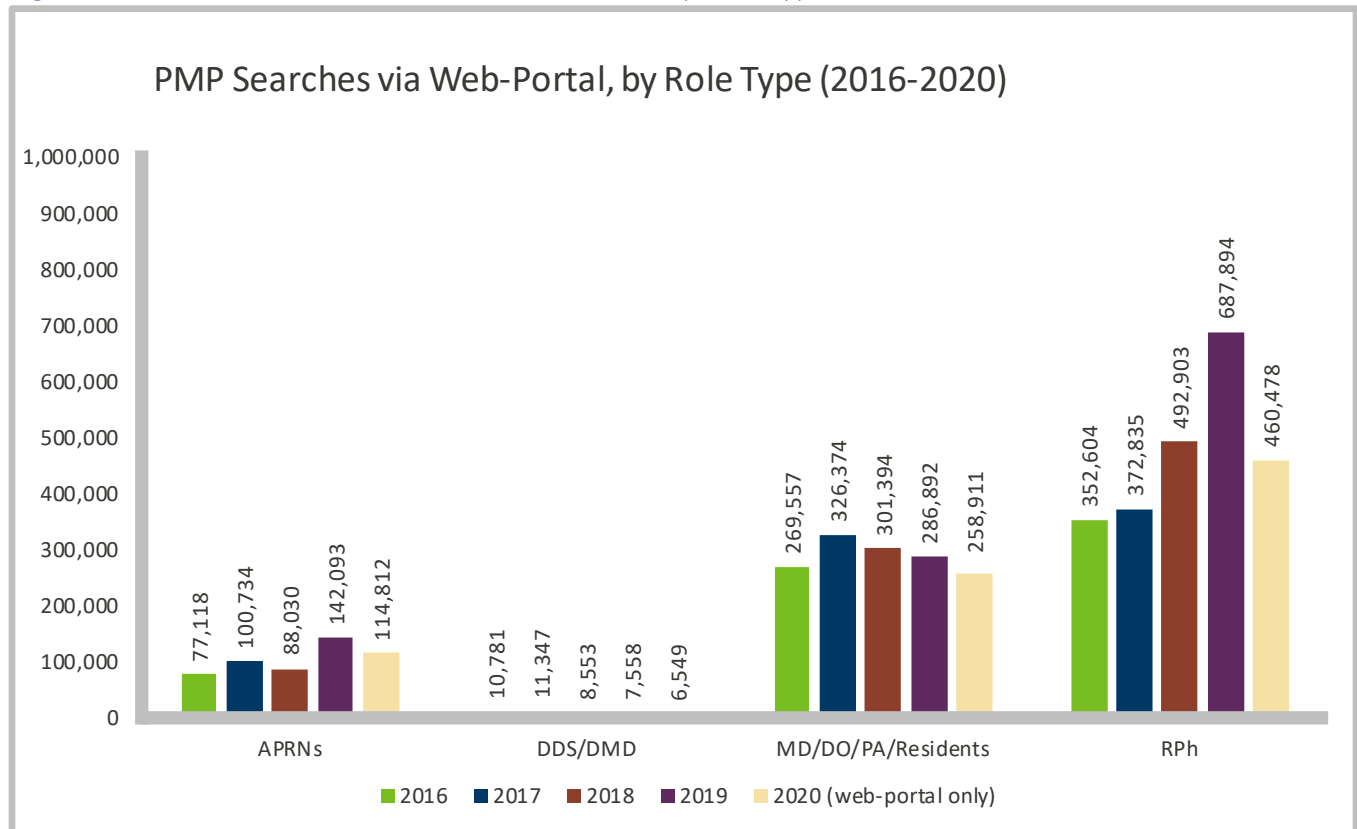
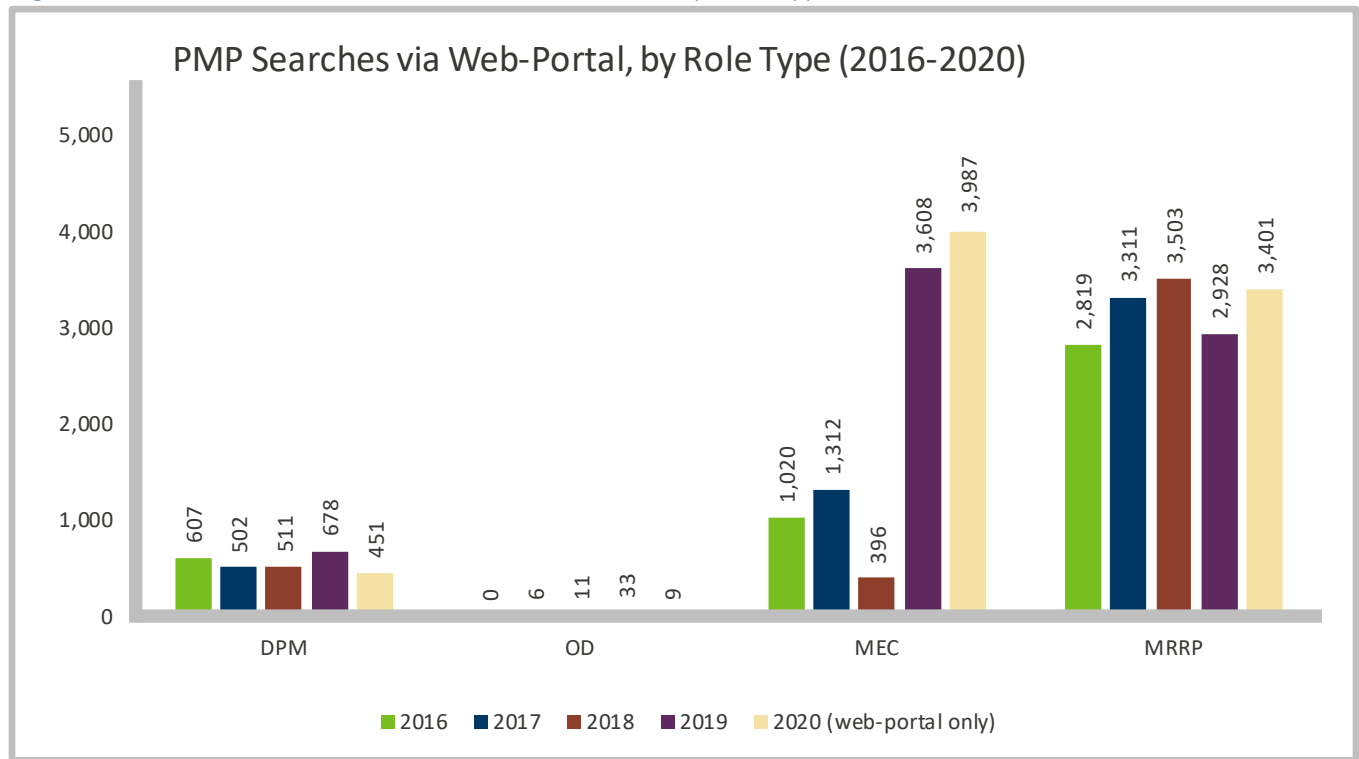


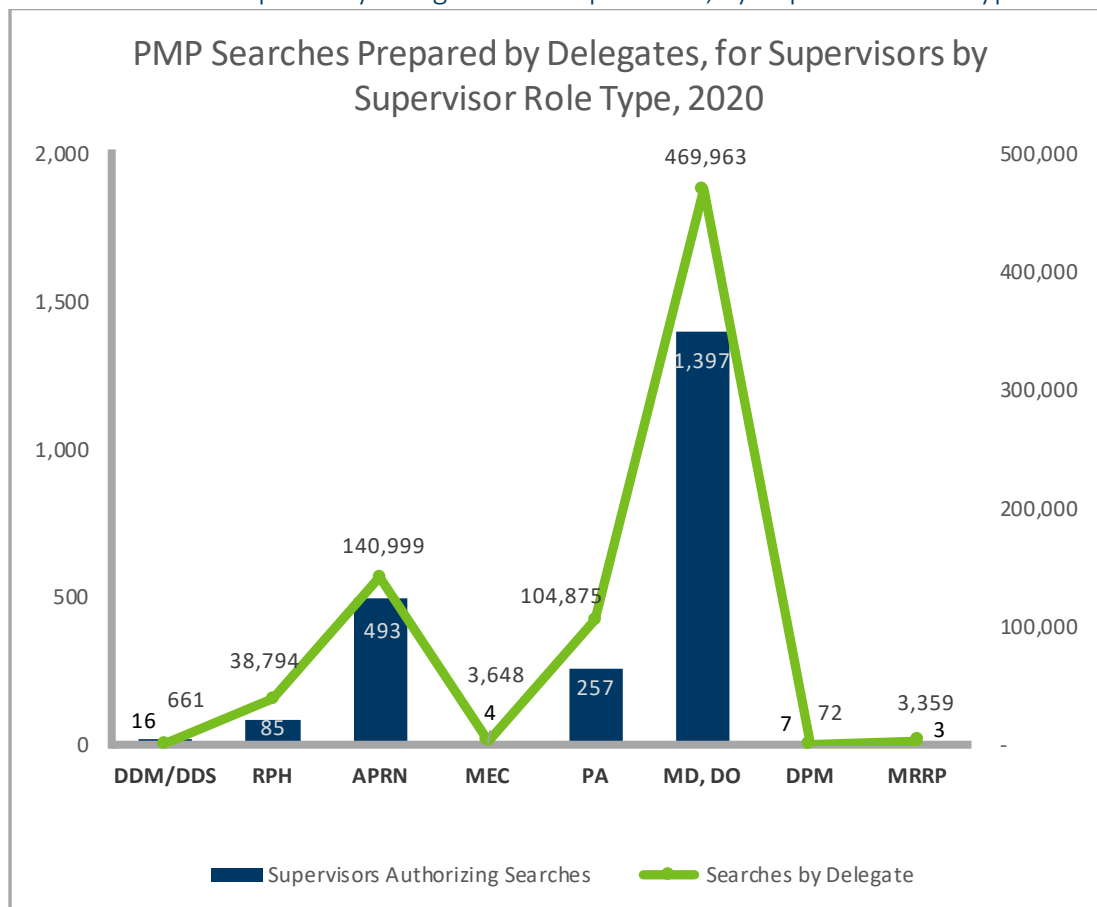
Figure 9b. Searches Performed via PMP Web Portal by Role Type, 2016-2020



Delegate Access

Figure 10 shows utilization by delegates by supervisor role type. With advanced reporting tools now available with a newer software system, the PMP staff are able to determine association of a delegate search directly to the supervising account holder. Figure 10 shows the distribution of searches, as attributed to the supervisor role type, a delegate is searching on behalf of.

Figure 10 PMP Searches Prepared by Delegates for Supervisors, by Supervisor Role Type – 2020



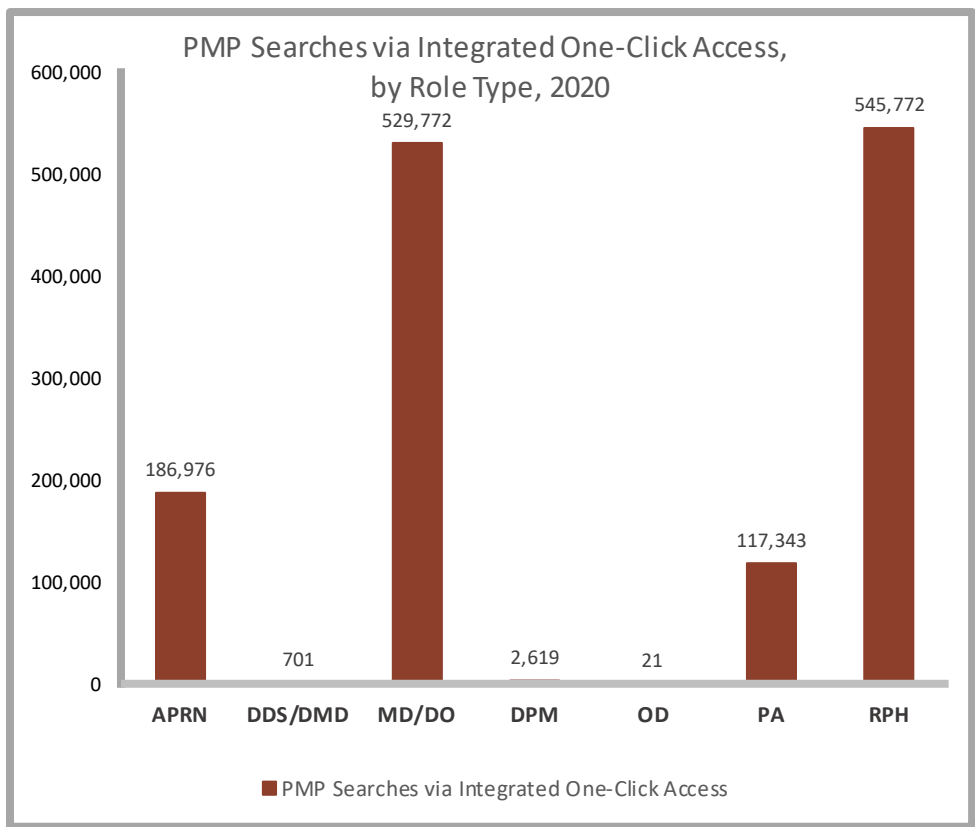
Integrated One-Click Access

The Minnesota PMP has seen a drastic increase in utilization by searching within a health information system that has integrated one-click access to view a PMP history report. This functionality is performed by a healthcare entity (hospital, clinic, pharmacy, etc.) working with a third party vendor to program a link directly into their electronic health record (EHR) or pharmacy dispensing software (PDS) system to enable a one-click communication with the MN PMP. This link, when initiated by an authorized MN PMP account holder, will send the account holder's credentials as well as the required patient demographic information and return a view of their MN PMP report within 1-2 seconds.

Requests from healthcare entities to access data via this integrated link are reviewed individually by program staff prior to approval. Entities in Minnesota and jurisdictions that we have data sharing agreements with can submit requests for integrated access. There is a cost associated; an annual licensing fee payable to the third-party vendor, which has been the primary barrier to more entities providing this option for their staff. However, since the Board of Pharmacy has funded a state-wide license, beginning August 24, 2020, requests have increased significantly. In 2020 there have been 141 requests from entities in MN which were approved for access, compared to 59 in 2019, and 2 in 2018! An entity may range from one prescriber or pharmacist to hundreds if not thousands. It is estimated that **as of December 31, 2020, over 13,500 prescribers and almost 500 pharmacies in MN have access to PMP reports with one-click without leaving their clinical workflow.**

Figure 11 shows the number of MN PMP history reports requested via integrated access, by role type from Minnesota healthcare providers, in 2020.

Figure 11. Count of MN PMP Searches within a Health Information System that has Integrated One-click Access



Figures 12a and 12b show data by role type, first broken down by search method, then total searches by search method.

Figure 12a. Comparison of Search Methods for PMP Reports, by Role Type – 2020

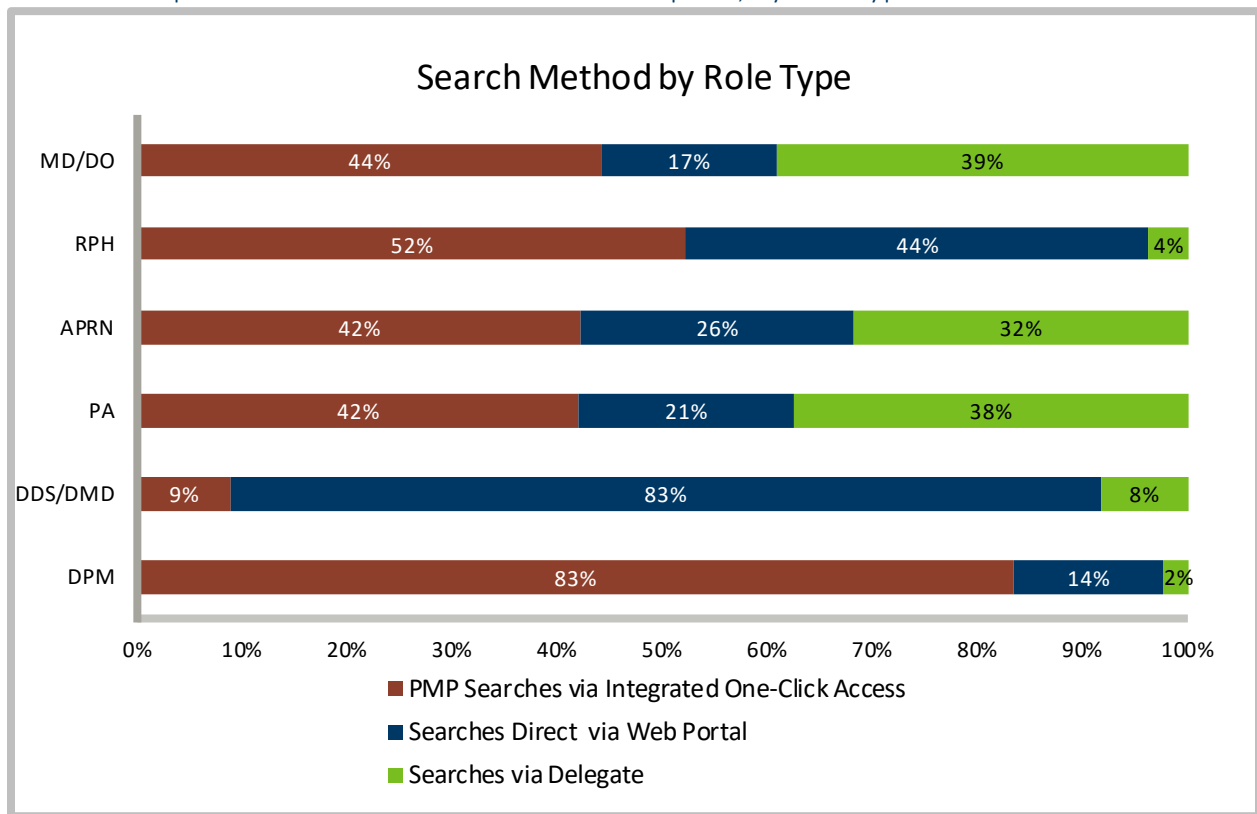
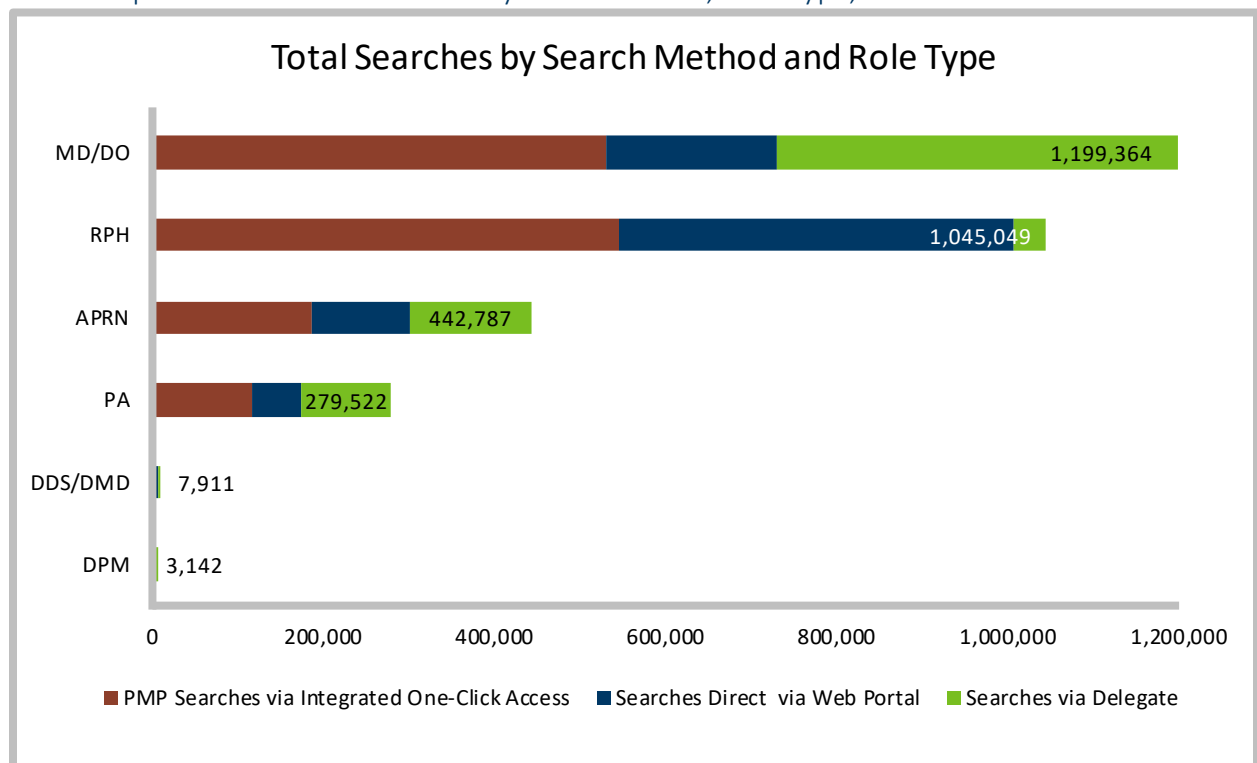


Fig 12b. Comparison of Search Methods by Total Searches, Role Type, 2020



Other Permissible Use of PMP Data

In addition to prescribers, pharmacists, and their delegates, the law allows others to obtain patient history reports data from the PMP staff. By submitting a valid search warrant, law enforcement officials can receive a report that contains any of the following data:

- a recipient's controlled substance prescription history,
- the history of all reported controlled substance prescriptions associated with a prescriber based on their DEA registration, or
- the history of controlled substance prescriptions reported as dispensed by a dispenser.

In all cases, the MN Board of Pharmacy staff assigned the duties of administering the PMP, access the database and the resulting report is sent to the requestor. In 2020, law enforcement officials presented the MN PMP staff with 616 search warrants, a **4.6% increase** from the search warrants received in 2019.

The recipients of the controlled substance prescriptions reported to the PMP are also permitted to obtain information regarding their own prescription history. A request for release of the data, which has been signed in the presence of a notary public and sent to the PMP office, is required. As with requests made by law enforcement officials, the PMP staff access the database and the resulting report is sent to the requestor. A provision was put in place that will also allow the recipient to give consent for release of the report to a third party. Legal counsel, probation officials, MN Health Licensing Boards, and others have used this provision. In 2020, the PMP staff processed 499 requests from recipients or their designee, an **12.9% increase** in requests from 2019.

Figure 13 shows the number of law enforcement and recipient requests received throughout 2020.

Figure 13. Law Enforcement and Recipient Requests - 2020

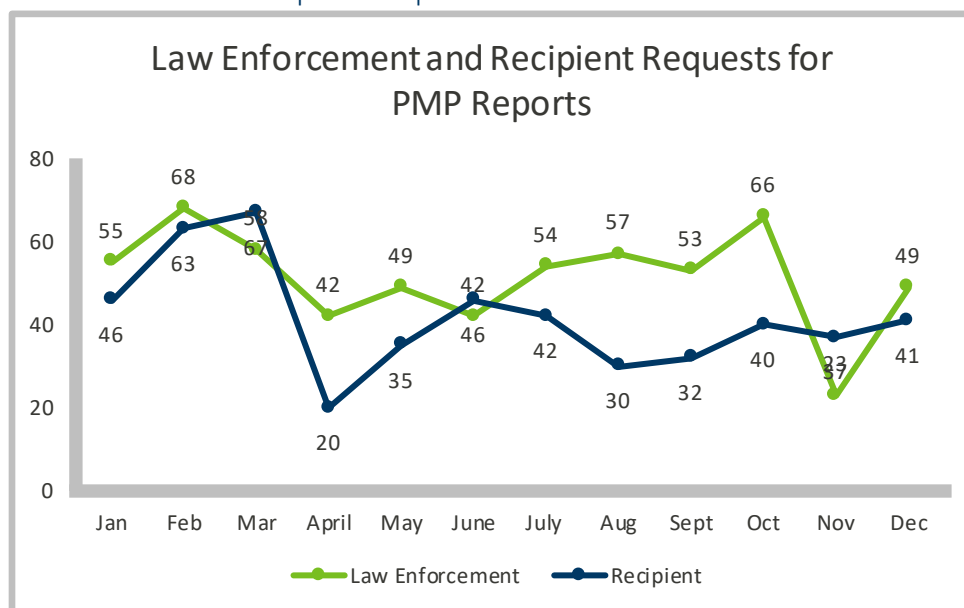
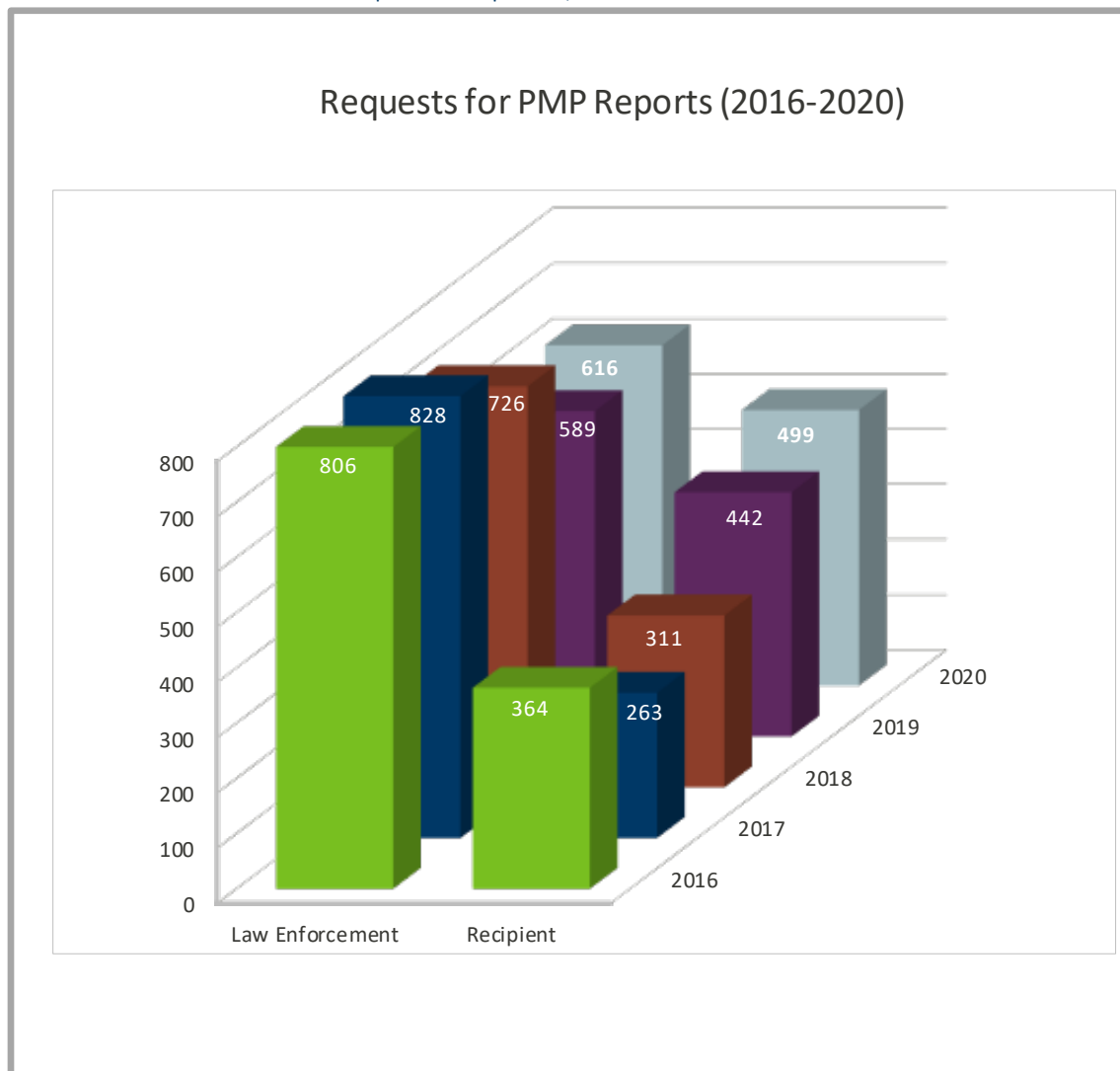


Figure 14 shows the initial increase and then stability in volume of requests received from law enforcement and individuals in the period between 2016 and 2020.

Figure 14. Law Enforcement and Recipient Requests, 2016-2020



MULTIPLE JURISDICTION DATA EXCHANGE

The MN PMP has been participating in a multijurisdictional data exchange system since July 2014. [MN Stats. §152.126, Subd. 6\(j\)](#) permits the Board to participate in a system, provided that permissible account holders in other jurisdictions may access MN patient history reports only as allowed under MN law. Minnesota continues to work towards expanding connections to provide additional searching capabilities to Minnesota health care providers as well as providers nationally caring for Minnesota citizens.

The interstate sharing hubs allow PMPs across the United States additional information to provide a more effective means of combating drug diversion and drug misuse nationwide. It should be noted that the “hub” retains no PMP data. The system acts as a pass-through for transferring a patient history report to the requesting jurisdiction’s authorized PMP account holder. Each participating PMP controls who, from a collaborating jurisdiction, can access reports based on their own laws and regulations.

At the end of 2020, MN is actively connected to **43 participating jurisdictions**. Table 15 shows the jurisdictions with which MN is actively connected to. Only approved MN prescribers, pharmacists, and their delegates holding active MN PMP accounts have access to patient history reports from participating jurisdictions.

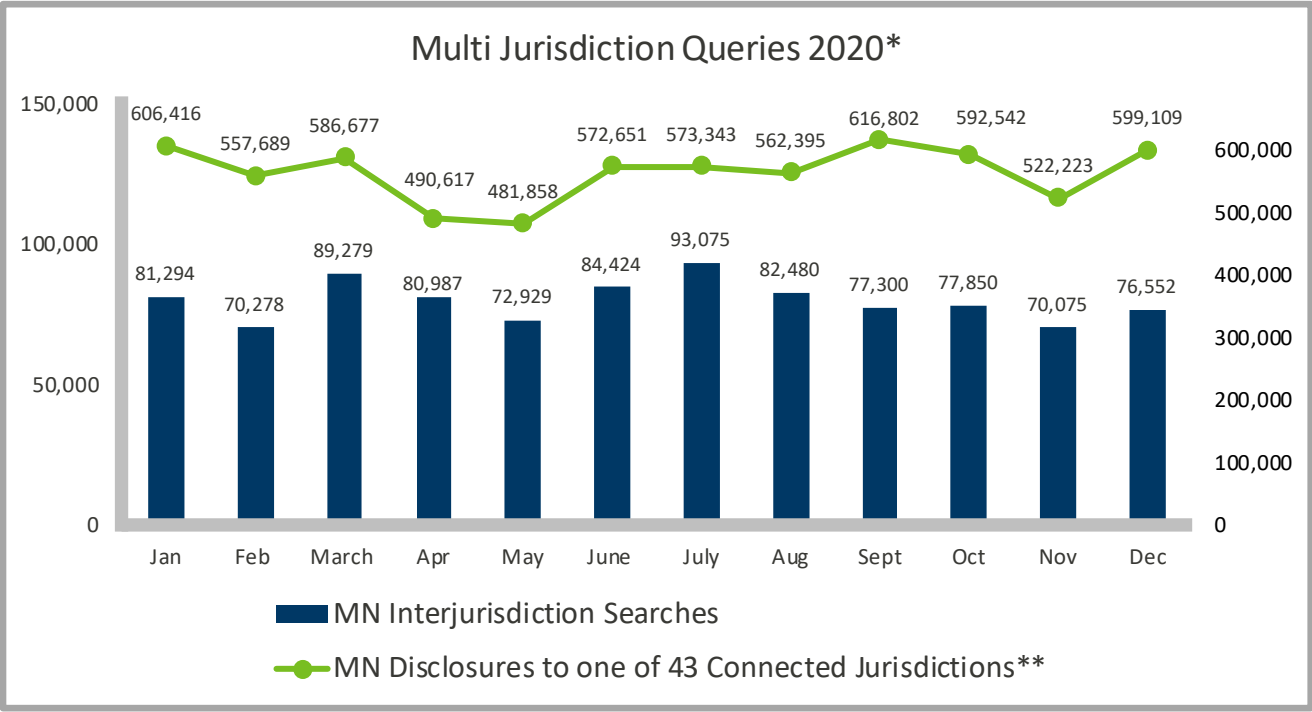
Table 15. Jurisdictions Actively Exchanging PMP Data with MN Account Holders

Alabama*	Iowa*	Nevada*	South Carolina*
Alaska*	Kansas*	New Jersey*	South Dakota*
Arizona*	Kentucky	New Mexico	Tennessee
Arkansas	Louisiana*	New York	Texas*
Colorado	Maine*	North Carolina	Virginia*
Connecticut*	Maryland	North Dakota	Washington
Delaware	Massachusetts	Ohio*	Washington DC*
Florida	Michigan*	Oklahoma	West Virginia
Idaho	Military Health Systems	Pennsylvania*	Wisconsin
Illinois*	Mississippi*	Puerto Rico	Wyoming*
Indiana	Montana	Rhode Island	

**Select role types may not be permitted by this jurisdiction to access patient PMP history.*

Using the MN PMP web portal, authorized MN PMP account holders made **956,523 data requests** to other participating jurisdictions in 2020. During this same time, other participating jurisdiction’s authorized PMP account holders made **6,762,322 requests for MN PMP** controlled substance history reports. Figure 15 is a breakdown of report requests, by month.

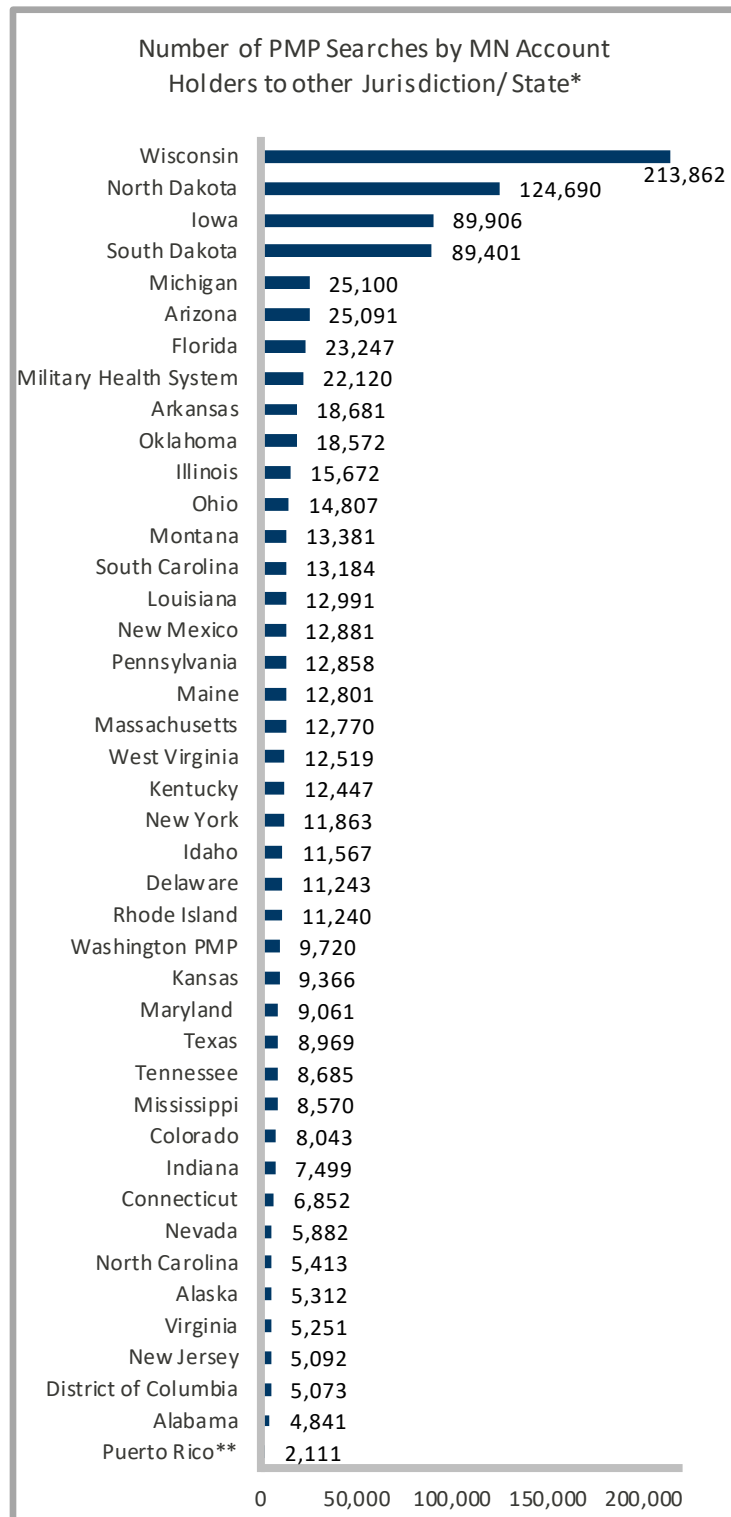
Figure 15. Multiple Jurisdiction PMP Report Requests – 2020



**Multijurisdictional searches presented include only searches performed through the web portal. **In June 2020 the Minnesota program staff enabled connection to Puerto Rico’s PMP. Searches for this jurisdiction will reflect a partial year.*

Figures 16a and 16b reflect the volume of reports requested by MN account holders to PMP databases in other jurisdictions, compared to the volume of MN patient reports requested by other jurisdiction’s PMP account holders. MN account holders search for records in border states most frequently. For other jurisdictions volume varies and is dependent on multiple factors including but not limited to legislative search requirements, automatic defaults set by administrators, and resident travel patterns. This information exchange is important for reviewing data on individuals who receive prescriptions dispensed across borders. Some states have legislative restrictions regarding data sharing or have focused on their border states only. As states and jurisdictions enable sharing or obtain technology to share, new connections are made.

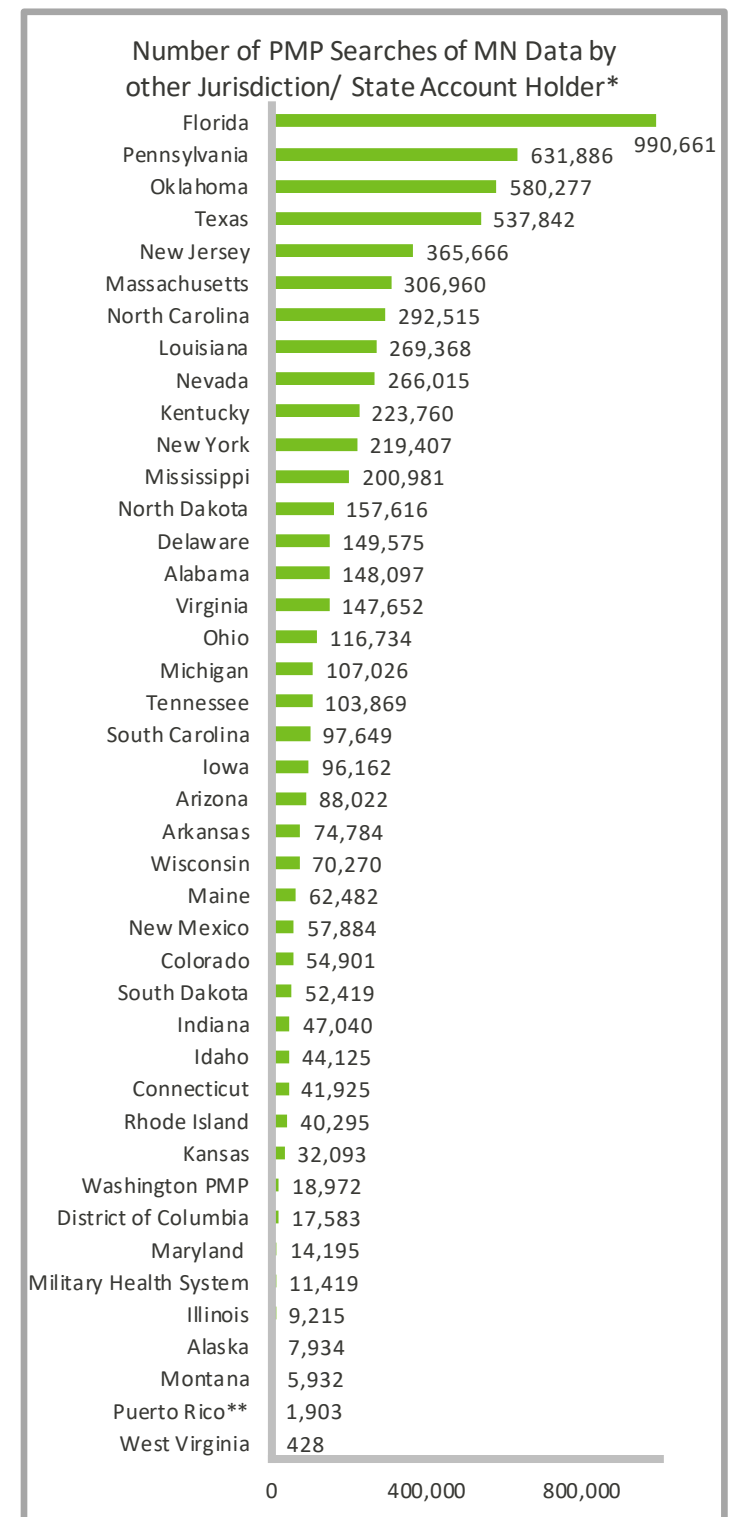
Figure 16a. Requests by Minnesota Account Holders for Patient PMP Data Responded to by other States and Jurisdictions - 2020



*Multijurisdictional searches presented include only searches performed through the web portal.

**indicates less than 12 months of PMP Searches

Figure 16b. Other States' and Jurisdictions' Account Holder Requests for PMP Reports Responded to by Minnesota – 2020



*Multijurisdictional searches presented include only searches performed through the web portal.

**indicates less than 12 months of PMP Searches

KEY TO ABBREVIATIONS

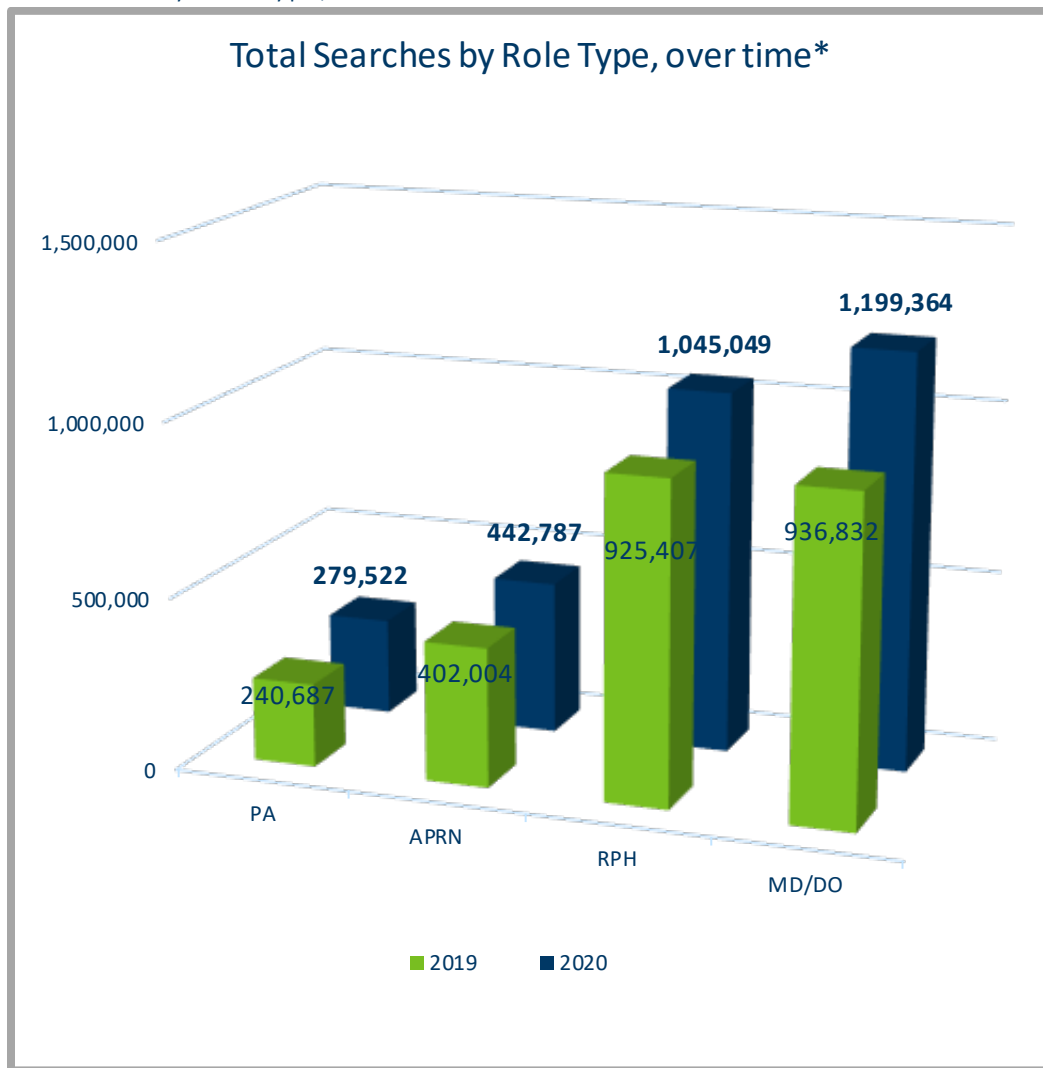
APAP: Acetaminophen, the generic of Tylenol®
APRN: Advanced Practice Registered Nurse
DDS: Doctor of Dental Surgery
DO: Doctor of Osteopathy
DMD: Doctor of Medicine in Dentistry
DPM: Doctor of Podiatric Medicine
MD: Medical Doctor
MEC: Medical Examiner/Coroner
MRRP: Medicaid Restricted Recipient Program
OD: Doctor of Optometry
PA: Physician Assistant
RPh: Pharmacist
Rx: Prescription

1. **U.S. Census Bureau, Population Division.** *Annual Resident Population Estimates, Estimated Components of Resident Population Change, and Rates of the Components of Resident Change for States and Counties.* s.l. : <https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-counties-total.html>, April 1, 2010 to July 1, 2020. 2021, May.
2. **McEvoy, G., Snow, E., Miller, J. et al, [ed.]**. *AHFS Drug Information 2020.* Bethesda, MD : American Society of Health-System Pharmacists, 2020.
3. **State of Minnesota, Governor Tim Walz.** Executive Orders from Governor Walz. *Office of Governor Tim Walz & Lt Governor Peggy Flanagan.* [Online] March 20, 2020. https://mn.gov/governor/assets/3a.%20EO%2020-20%20FINAL%20SIGNED%20Filed_tcm1055-425020.pdf. Executive Order 20-20 and 20-09.

Additional Utilization Data

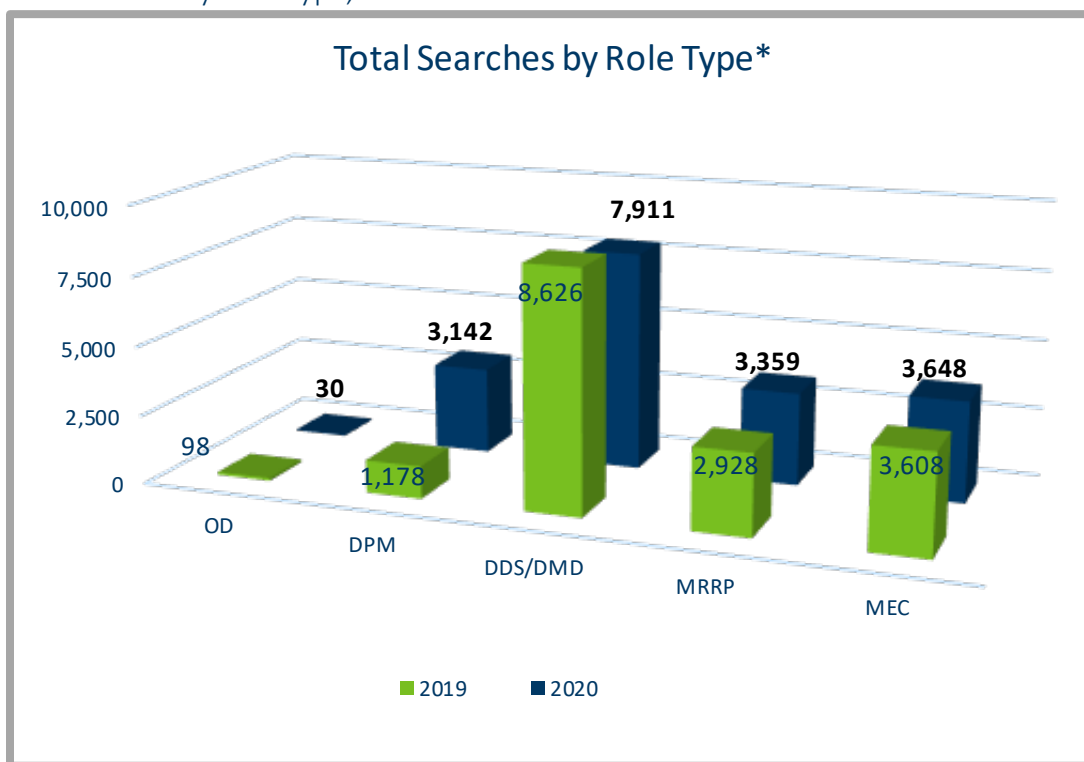
Previously, program capabilities to break down integrated one-click searches by role type have been limited, therefore annual reports prior to 2020 have only included web portal searches by role type, over time (Figures 9a and 9b.) Web portal searches are beginning to show a decline due to increased availability of one-click integrated access. Figures A1a and A1b include **all** searches *by role type, over time*: web portal, via one-click access, and performed by a delegate on a provider's behalf.

Figure A1a. Total Searches by Role Type, over time



*Includes searches via web portal, via delegate on behalf of the supervisor, and via a health IT system that has integrated one-click access to PMP searches.

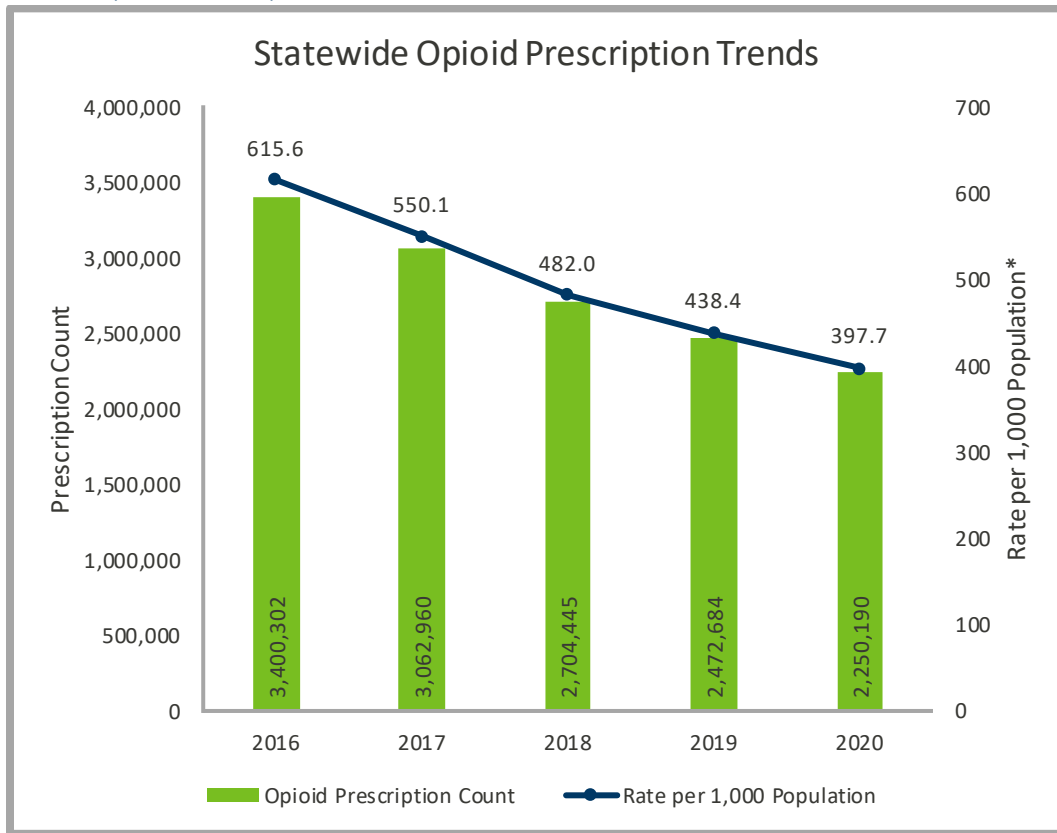
Figure A1b. Total Searches by Role Type, over time



**Includes searches via web portal, via delegate on behalf of the supervisor, and via a health IT system that has integrated one-click access to PMP searches.*

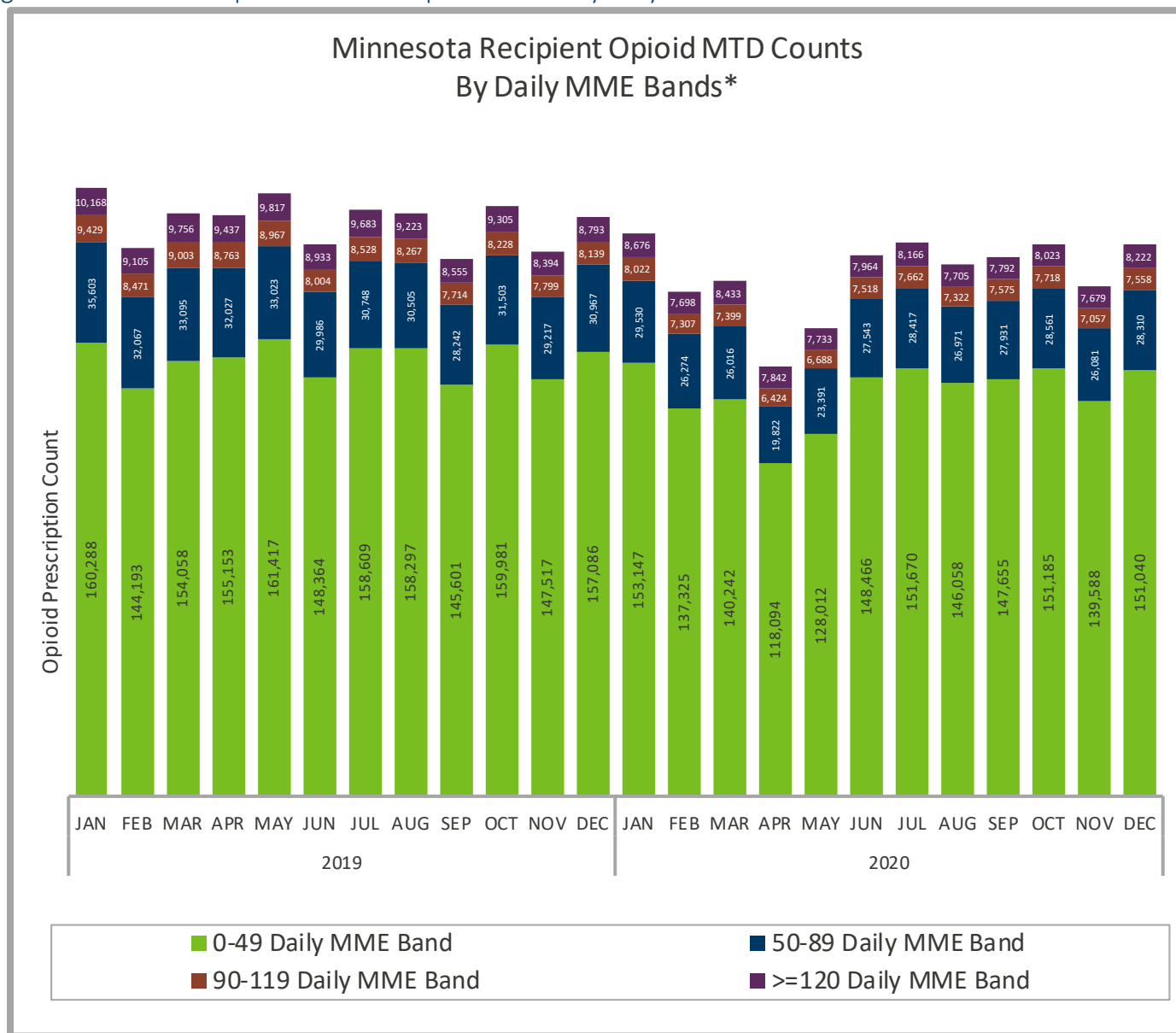
Additional Prescription Trend Analysis

Figure A2. Statewide Opioid Prescription Trends



**The opioid prescription count represents the volume of prescriptions dispensed to recipients with a Minnesota address, per the dispensers' records. The state crude rate portrayed utilizes U.S. Census Bureau population estimates, including 2020 Vintage estimates, and is regardless of age or whether Minnesota residents filled opiates. ⁽¹⁾*

Figure A3. Statewide Opioid MTD Prescription Counts by Daily MME Band*



* The opioid prescription count represents the volume of prescriptions dispensed to recipients with a Minnesota address, per the dispensers' records, monthly. For the purposes of this analysis, opioid dosage forms that are not commonly used in the outpatient setting were excluded (ampuls, cartridges, powders, syringes, and vials).