

STATE OF NORTH CAROLINA  
DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER  
GOVERNOR

KODY H. KINSLEY  
SECRETARY

June 8, 2022

**SENT VIA ELECTRONIC MAIL**

The Honorable Donny Lambeth, Chair  
Joint Legislative Oversight Committee on  
Health and Human Services  
North Carolina General Assembly  
Room 620, Legislative Office Building  
Raleigh, NC 27603

The Honorable Jim Burgin, Chair  
Joint Legislative Oversight Committee on  
Health and Human Services  
North Carolina General Assembly  
Room 308, Legislative Office Building  
Raleigh, NC 27603

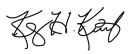
The Honorable Larry Potts, Chair  
Joint Legislative Oversight Committee on  
Health and Human Services  
North Carolina General Assembly  
Room 307B1, Legislative Office Building  
Raleigh, NC 27603

Dear Chairmen:

NC General Statute 90-113.75B, requires the Department of Health and Human Services, to submit an annual report on data reported to the controlled substances reporting system. This report is due to the Joint Legislative Oversight Committee on Health and Human Services, the NC Medical Board, the NC Board of Podiatry Examiners, the NC Board of Nursing, the NC Dental Board, the NC Veterinary Medical Board, and the NC Board of Pharmacy. Pursuant to the provisions of law, the Department is pleased to submit the attached reports for 2021 and 2022.

Should you have any questions regarding this report, please contact John Furnari, Program/Policy Analyst, at [John.Furnari@dhhs.nc.gov](mailto:John.Furnari@dhhs.nc.gov).

Sincerely,

DocuSigned by:  
  
D7816E4CBA6F4A8...  
Kody H. Kinsley  
Secretary

cc: Mark Collins Joyce Jones Katherine Restrepo Lisa Wilks Amy Jo Johnson  
Jessica Meed Theresa Matula Luke MacDonald Nathan Babcock

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STATE OF NORTH CAROLINA  
DEPARTMENT OF HEALTH AND HUMAN SERVICES

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SECRETARY

June 8, 2022

**SENT VIA ELECTRONIC MAIL**

Thomas Mansfield, Chief Legal Officer  
NC Medical Board  
PO Box 20007  
Raleigh, NC 27619

Julia George, Executive Director  
NC Board of Nursing  
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Tracy Steadman, Executive Secretary  
NC Board of Podiatry Examiners  
1500 Sunday Drive, Suite 102  
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Bobby White, CEO  
NC State Board of Dental Examiners  
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Tod Schadler, Executive Director  
NC Veterinary Medical Board  
1611 Jones Franklin Rd., Suite 106  
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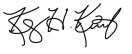
Jay Campbell, Executive Director  
NC Board of Pharmacy  
6015 Farrington Rd., Suite 201  
Chapel Hill, NC 27517

Dear Board Executives:

NC General Statute 90-113.75B, requires the Department of Health and Human Services, to submit an annual report on data reported to the controlled substances reporting system. This report is due to the Joint Legislative Oversight Committee on Health and Human Services, the NC Medical Board, the NC Board of Podiatry Examiners, the NC Board of Nursing, the NC Dental Board, the NC Veterinary Medical Board, and the NC Board of Pharmacy. Pursuant to the provisions of law, the Department is pleased to submit the attached reports for 2021 and 2022.

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# **2021 Controlled Substances Reporting System Annual Report**

**NC GS 90-113.75B**

**Amended by Session Law 2017-74, Section 12**



**Report to the**

**Joint Legislative Oversight Committee on Health and Human Services**

**North Carolina Medical Board**

**North Carolina Board of Podiatry Examiners**

**North Carolina Board of Nursing**

**North Carolina Dental Board**

**North Carolina Veterinary Medical Board**

**North Carolina Board of Pharmacy**

**By**

**North Carolina Department of Health and Human Services**

**June 8, 2022**

## **INTRODUCTION**

*G.S. § 90-113.75B Annually on February 1, beginning February 1, 2019, the Department shall report to the Joint Legislative Oversight Committee on Health and Human Services, the North Carolina Medical Board, the North Carolina Board of Podiatry Examiners, the North Carolina Board of Nursing, the North Carolina Dental Board, the North Carolina Veterinary Medical Board, and the North Carolina Board of Pharmacy on data reported to the controlled substances reporting system.*

## **BACKGROUND**

G.S. § 90-113.75B requires an annual report to the General Assembly and licensing boards (as specified in the introduction above) to be delivered on February 1<sup>st</sup> of each year beginning in 2019. The report must include at least all of the following information about targeted controlled substances reported to the system during the preceding calendar year:

- (1) The total number of prescriptions dispensed, broken down by Schedule.
- (2) Demographics about the ultimate users to whom prescriptions were dispensed.
- (3) Statistics regarding the number of pills dispensed per prescription.
- (4) The number of ultimate users who were prescribed a controlled substance by two or more practitioners.
- (5) The number of ultimate users to whom a prescription was dispensed in more than one county.
- (6) The categories of practitioners prescribing controlled substances and the number of prescriptions authorized by each category of practitioner. For the purpose of this subdivision, medical doctors, surgeons, palliative care practitioners, oncologists and other practitioners specializing in oncology, pain management practitioners, practitioners who specialize in hematology, including the treatment of sickle cell disease, and practitioners who specialize in treating substance use disorder shall be treated as distinct categories of practitioners.
- (7) Any other data deemed appropriate and requested by the Joint Legislative Oversight Committee on Health and Human Services, the North Carolina Medical Board, the North Carolina Board of Podiatry Examiners, the North Carolina Board of Nursing, the North Carolina Dental Board, the North Carolina Veterinary Medical Board, or the North Carolina Board of Pharmacy.

## **DATA COLLECTION AND EXPLANATORY NOTES**

Pharmacies in North Carolina are responsible for submitting data on any schedule II-V controlled substances they dispense no later than the close of the next business day after the prescription is delivered. The data comes in a standard American Society for Automation in Pharmacy (ASAP) format, which includes details on the transaction such as the patient, prescriber, and pharmacy.

The quality of the prescription data is dependent on the accuracy of pharmacist submissions. Prescriptions are constantly being added and modified within the system, so the values in this report will change slightly with time. Prescriber specialty (Exhibit 6) is based on self-reported specialties in the National Plan and Provider Enumeration System (NPPES), the Drug Enforcement Agency (DEA), the North Carolina Medical Board, and the Controlled Substances Reporting System (CSRS).

On March 27, 2020 Governor Roy Cooper issued Executive Order 121, a statewide, 30 day Stay at Home order to help stop the spread of the novel coronavirus COVID19. It is after this date that significant decreases in the number of controlled substances dispensed was observed within the Controlled Substances Reporting System indicating a change in health seeking behavior as a result of the COVID19 pandemic.

## EXHIBITS AND NOTES

### **Exhibit 1: Prescriptions by Schedule**

In total, 17,100,256 controlled substance prescriptions were dispensed in 2020<sup>1</sup>. In 2019, 18,057,312 prescriptions for controlled substances were dispensed. There has been a decline in the dispensing of all controlled substances for human patients. The largest decline has been seen in the number of Schedule II controlled substances dispensed. Schedule II controlled substances were the most dispensed in 2020, accounting for 45% of all controlled substance dispensing. This is followed by prescription dispenses in Schedule IV, accounting for 42% of all controlled substance prescriptions dispensed. The most common type of drugs in Schedule II and Schedule IV are opioids and benzodiazepines respectively. See Exhibit 6 for further information.

In 2020, the proportion of human prescriptions listed as uncategorized was 1%, the same proportion reported in 2019. The proportion of veterinary prescriptions listed as uncategorized was 17%, this is higher than the proportion reported in 2019 (14%) which is most likely the result of receiving a full year of data from this sector.

<b>Table 1.1 - Total Prescriptions by Schedule in 2020</b>			
<b>Schedule</b>	<b>Human Rx</b>	<b>Veterinary Rx</b>	<b>Total</b>
II	7,667,537	19,786	7,687,323
III	1,374,510	2,891	1,377,401
IV	7,063,330	119,825	7,183,155
V	704,942	1,231	706,173
Data Missing	116,947	29,257	146,204
Total	16,927,266	172,990	17,100,256

Schedule II substances are currently recognized for medical use but have a high potential for abuse, which may lead to severe psychological or physical dependence. Examples include Hydrocodone, Oxycodone, Fentanyl, Amphetamine Salts and Cocaine.

Schedule III substances have a potential for abuse that is less than schedule II and may lead to moderate dependence. Examples include: Buprenorphine, Ketamine, Tylenol with codeine, testosterone, and anabolic steroids.

Schedule IV substances have a lower potential for abuse compared to schedule III. Examples include: benzodiazepines such as alprazolam (Xanax®), carisoprodol (Soma®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®).

Schedule V substances have lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics and are generally used for antidiarrheal, antitussive, and analgesic (pain relief) purposes. Examples include Robitussin AC, Lomotil, and Lyrica.

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<sup>1</sup> This data is accurate as of 03 January 2021. Some variation may occur due to late submissions.

### **Exhibit 2: Demographics**

The data has been aggregated by two demographic categories: Counties (Table 2.1) and Age Group and Gender (Table 22). These tables contain a combination of human and veterinary prescriptions due to the small numbers in the veterinary category. This count of unique patients may differ from the sum of all categories because patients may have moved between counties during the reporting period causing them to be indicated in more than one county.

It is noted that Mecklenburg and Chowan have the smallest controlled substance prescription per patient ratio of all North Carolina counties (5.04 and 5.05 prescriptions per patient respectively) and Mitchell has the highest (8.05) See Table 2.1 below. Swain has the highest rate of prescriptions per 1,000 residents.

***Table 2.1 - Number of Controlled Substance Prescriptions Dispensed by County of Patient Residence in 2020***

<b>NC County</b>	<b>Prescriptions</b>	<b>Patients</b>	<b>Rx per Patient</b>	<b>Rx per 1,000 population</b>
Alamance	256,329	43,190	5.93	1,472.69
Alexander	82,010	10,916	7.51	2,116.11
Alleghany	19,599	3,395	5.77	1,702.78
Anson	35,179	6,490	5.42	1,391.08
Ashe	56,675	7,932	7.15	2,013.32
Avery	40,363	5,594	7.22	2,238.04
Beaufort	112,532	15,288	7.36	2,369.59
Bertie	30,908	5,456	5.66	1,576.86
Bladen	60,544	8,869	6.83	1,757.75
Brunswick	286,427	43,319	6.61	1,960.02
Buncombe	414,337	65,365	6.34	1,551.56
Burke	187,486	24,761	7.57	2,039.35
Cabarrus	329,617	54,595	6.04	1,521.72
Caldwell	194,166	26,467	7.34	2,319.70
Camden	13,313	2,393	5.56	1,242.23
Carteret	148,045	21,594	6.86	2,066.51
Caswell	20,478	3,111	6.58	865.29
Catawba	344,404	50,873	6.77	2,145.77
Chatham	67,653	11,521	5.87	870.55
Cherokee	64,742	8,902	7.27	2,160.08
Chowan	20,198	3,999	5.05	1,435.13
Clay	23,638	3,491	6.77	1,960.36
Cleveland	232,079	33,554	6.92	2,314.10
Columbus	132,528	17,918	7.40	2,357.31
Craven	195,823	30,330	6.46	1,883.22

NC County	Prescriptions	Patients	Rx per Patient	Rx per 1,000 population
Cumberland	468,394	79,257	5.91	1,405.71
Currituck	30,598	5,098	6.00	1,094.66
Dare	69,981	10,864	6.44	1,863.18
Davidson	277,377	41,924	6.62	1,623.15
Davie	85,160	13,260	6.42	1,937.00
Duplin	80,075	13,350	6.00	1,340.03
Durham	322,870	61,232	5.27	1,007.95
Edgecombe	76,368	13,634	5.60	1,456.10
Forsyth	596,853	103,378	5.77	1,557.86
Franklin	91,972	15,470	5.95	1,309.92
Gaston	512,528	69,640	7.36	2,289.69
Gates	9,835	1,748	5.63	808.47
Graham	18,848	2,467	7.64	2,169.93
Granville	75,029	12,190	6.15	1,207.28
Greene	24,855	4,030	6.17	1,180.70
Guilford	796,578	139,205	5.72	1,460.68
Halifax	84,371	13,923	6.06	1,659.61
Harnett	186,054	28,068	6.63	1,354.52
Haywood	124,874	18,193	6.86	1,956.87
Henderson	195,903	31,682	6.18	1,636.21
Hertford	31,354	5,408	5.80	1,305.60
Hoke	57,394	9,842	5.83	1,028.53
Hyde	7,634	1,142	6.68	1,480.61
Iredell	357,159	55,737	6.41	1,940.84
Jackson	63,453	9,178	6.91	1,414.85
Johnston	274,122	43,861	6.25	1,290.59
Jones	21,397	3,242	6.60	2,098.98
Lee	119,056	19,037	6.25	1,907.06
Lenoir	101,218	16,762	6.04	1,808.66
Lincoln	171,277	26,535	6.45	1,943.00
Macon	54,785	9,791	5.60	1,484.81
Madison	35,836	5,362	6.68	1,568.80
Martin	45,912	7,011	6.55	1,992.79
McDowell	84,397	12,828	6.58	1,799.32
Mecklenburg	1,236,447	245,250	5.04	1,092.90
Mitchell	35,896	4,458	8.05	2,352.60
Montgomery	42,311	6,677	6.34	1,526.81

NC County	Prescriptions	Patients	Rx per Patient	Rx per 1,000 population
Moore	166,985	27,100	6.16	1,622.00
Nash	148,458	24,723	6.00	1,547.68
New Hanover	417,528	65,119	6.41	1,744.99
Northampton	26,110	4,646	5.62	1,288.87
Onslow	272,554	41,956	6.50	1,333.72
Orange	188,619	32,692	5.77	1,269.22
Pamlico	20,828	3,194	6.52	1,568.02
Pasquotank	54,192	10,496	5.16	1,365.55
Pender	111,322	16,549	6.73	1,723.84
Perquimans	18,946	3,720	5.09	1,389.31
Person	74,620	10,768	6.93	1,841.15
Pitt	288,213	45,292	6.36	1,592.29
Polk	26,927	4,281	6.29	1,232.24
Randolph	233,412	35,130	6.64	1,600.83
Richmond	108,755	14,012	7.76	2,417.15
Robeson	269,578	39,341	6.85	2,065.27
Rockingham	214,850	28,938	7.42	2,339.65
Rowan	260,100	38,108	6.83	1,815.59
Rutherford	143,218	19,775	7.24	2,072.47
Sampson	101,329	16,695	6.07	1,572.02
Scotland	70,190	10,377	6.76	1,966.66
Stanly	116,362	18,244	6.38	1,811.48
Stokes	105,419	14,831	7.11	2,273.92
Surry	161,410	23,323	6.92	2,204.12
Swain	41,117	5,422	7.58	2,914.45
Transylvania	66,084	9,758	6.77	1,845.61
Tyrrell	5,047	904	5.58	1,184.74
Union	328,526	58,802	5.59	1,353.87
Vance	70,158	11,510	6.10	1,520.48
Wake	1,410,660	263,578	5.35	1,271.00
Warren	18,295	3,335	5.49	919.44
Washington	19,974	3,357	5.95	1,666.31
Watauga	63,489	9,954	6.38	1,081.01
Wayne	173,746	30,053	5.78	1,372.34
Wilkes	148,536	20,381	7.29	2,107.19
Wilson	125,628	20,726	6.06	1,519.54



NC County	Prescriptions	Patients	Rx per Patient	Rx per 1,000 population
Yadkin	81,317	11,795	6.89	2,126.71
Yancey	34,672	5,087	6.82	1,844.84
Unspecified	9,833	1,375	7.15	N/A
Out-of-State	666,005	146,157	4.56	N/A
Total	17,100,256	2,821,480	6.06	1,608.57

**Table 2.2- Summary of North Carolina Dispensing Metrics in 2019 and 2020**

Dispensing Metrics	2019			2020		
	Lowest Value	Highest Value	Total	Lowest Value	Highest Value	Total
Prescriptions	5,936	1,496,965	17,898,179	5,047	1,410,660	16,434,251
Patients	1,096	298,830	3,107,167	904	263,578	2,675,404
Rx per patient	4.75	7.74	5.76	5.04	8.05	6.14

The information in Table 2.2 excludes Out of State prescriptions and patients. There was a decrease in prescribing over-all and the gap in the range of values is getting smaller. There has been a slight increase in the number of prescriptions per patient despite a smaller number of patients. While the significance of these differences is not yet clear, they are being monitored in an effort to further identify and clarify whether this is a one-time occurrence or a developing trend warranting further study.

**Table 2.3 - Number of Prescriptions Dispensed by Age and Gender**

Age Range	Male	Female	Unknown	Total
0-9	264,749	137,679	6,948	409,376
10-19	560,753	388,587	8,200	957,540
20-29	434,916	681,078	4,475	1,120,469
30-39	792,932	1,329,855	7,436	2,130,223
40-49	981,710	1,709,132	9,025	2,699,867
50-59	1,369,507	2,140,026	11,639	3,521,172
60-69	1,377,378	1,982,828	8,658	3,368,864
70-79	808,383	1,200,074	4,136	2,012,593
80+	278,881	599,540	1,486	879,907
Unknown	39	46	160	245
Total	6,869,248	10,168,845	62,163	17,100,256

The number of controlled substance prescriptions dispensed increases significantly between the 0-9 age range and the 0-19 age range. There is another significant increase between the 20-29 age group and the 30-39 age group. The steepest increases are between the 40-49 age group and the 50-59 age group, after which the number of controlled substance prescriptions dispensed starts to decline. By gender, females have a higher number of dispensed prescriptions for controlled substances than males from the 20-29 age group onwards.

### **Exhibit 3: Pill Statistics**

The classification of controlled substance with the highest number of prescriptions dispensed in 2020 was Opioids followed by a category called No CDC class, and then Benzodiazepines. (Table 3.1 below). No CDC Class denotes that the Center for Disease Control does not have a classification on file for the drug in question. Most controlled substance prescriptions (47%) are dispensed in quantities of 30 pills or less. Opioids remain the most commonly dispensed controlled substance in all quantity ranges.

***Table 3.1 – Pill Quantity by Classification***

<b>Quantity Range</b>	<b>Benzo</b>	<b>Muscle Relaxant</b>	<b>Opioid</b>	<b>Sedative</b>	<b>Stimulant</b>	<b>^No CDC Class</b>	<b>Total</b>
1-30	1,418,958	4,192	2,377,907	896,843	1,594,422	1,681,765	7,974,087
31-60	906,970	3,607	1,254,026	27,843	418,974	976,562	3,587,982
61-90	510,471	5,201	964,642	80,137	144,803	553,941	2,259,195
91-120	102,253	1,972	961,938	229	21,060	156,620	1,244,072
121-150	12,830	63	128,360	573	3,994	19,251	165,071
151-180	33,078	172	190,033	691	11,437	70,299	305,710
181+	16,427	263	80,472	44	3,664	37,834	138,704
Not Pills	23,620	1	389,986	184	18,581	992,912	1,425,284
Data Missing	32	0	47	3	5	64	151
<b>Total</b>	<b>3,024,639</b>	<b>15,471</b>	<b>6,347,411</b>	<b>1,006,547</b>	<b>2,216,940</b>	<b>4,489,248</b>	<b>17,100,256</b>

^No CDC Class – The Center for Disease Control (CDC) does not have a classification on file for the drug

#### **Exhibit 4: Patients with Multiple Prescribers**

The data indicates that 54.38% of patients saw one prescriber for their dispensed controlled substances. This is similar to the percentage noted in 2019 data (54.83%). Pet and animal owners were more likely to receive controlled substance prescriptions for their animals from one veterinarian.

**Table 4.1 Prescriber counts (human patients)**

<b>Prescribers</b>	<b>Patients</b>	<b>Percentage</b>
1	1,490,583	54.38%
2	646,733	23.59%
3	303,322	11.07%
4	147,973	5.40%
5	73,295	2.67%
6	37,178	1.36%
7	19,468	0.71%
8	10,168	0.37%
9	5,374	0.20%
10+	7,099	0.26%
<b>Total</b>	<b>2,741,193</b>	

**Table 4.2 Prescriber counts (Veterinary)**

<b>Prescribers</b>	<b>Patients</b>	<b>Percentage</b>
1	72,451	88.62%
2	7,417	9.07%
3	1,506	1.84%
4	299	0.37%
5	58	0.07%
6	15	0.02%
7	5	0.01%
8	1	0.00%
9	0	0.00%
10+	0	0.00%
<b>Total</b>	<b>81,752</b>	

### **Exhibit 5: Patients with Multiple County Dispensing**

The largest percentage of patients had controlled substance prescriptions dispensed in only one county (Tables 5.1 and 5.2 below). There is little change in this pattern compared to 2019.

**Table 5.1 - Dispenser Counties (Human patients)**

Counties	Patients	Percentage
1	2,488,713	90.79%
2	221,540	8.08%
3	27,321	1.00%
4	3,185	0.12%
5	380	0.01%
6	40	0.00%
7	8	0.00%
8	5	0.00%
9	1	0.00%
10+	0	0.00%
Total	2,741,193	

Table 5.2 - Dispenser Counties (Veterinary patients)		
Counties	Patients	Percentage
1	81,464	99.65%
2	284	0.35%
3	4	0.00%
4	0	0.00%
5	0	0.00%
6	0	0.00%
7	0	0.00%
8	0	0.00%
9	0	0.00%
10+	0	0.00%
Total	81,752	

**Exhibit 6: The categories of practitioners prescribing controlled substances and the number of prescriptions authorized by each category of practitioner**

Of the identified specialties, the largest categories for both controlled substance prescriptions and patients are Other followed by Medical Doctor (Table 6.1 below). These two specialties account for 51% and 44% of all controlled substances prescribed and dispensed. Dentists are the third most frequent prescribers of controlled substances.

Of the identified specialties, Substance Use Disorder<sup>2</sup> and Pain Management provide the highest prescription rate per patient compared to other specialties. Dentists have the lowest rate of prescriptions per patient.

***Table 6.1 – Number of controlled substance prescriptions dispensed by prescriber specialty***

<b>Specialty</b>	<b>Prescriptions</b>	<b>Patients</b>	<b>Rx per Patient</b>
Dentist	354,551	276,227	1.28
Hematology	7,506	2,062	3.64
Medical Doctor	7,460,614	1,460,710	5.11
Oncology	85,029	23,286	3.65
Pain Management	230,746	39,679	5.82
Palliative Care	12,830	4,121	3.11
Substance Use Disorder	23,493	3,085	7.62
Veterinary	170,157	80,665	2.11
+Other	8,703,265	1,596,133	5.45
Unspecified	52,065	15,550	3.35
<b>*Total</b>	<b>17,100,256</b>	<b>2,821,480</b>	<b>6.06</b>

+Specialty other than those in this list (e.g., Nurse Practitioner, Prescribing Pharmacist, et. al.)

\*This is the total of unique patients and differs from the sum of all categories because unique patients may see more than one practitioner specialty.

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<sup>2</sup> The classification of Substance Use Disorder specialty contains data from prescriptions dispensed at a pharmacy to a patient and does not include data from Substance Use Treatment services that dispense medications on site or less than 48 hours supply.

Opioids remain the most prescribed and dispensed controlled substance across all specialties except Veterinary. Controlled substances with no CDC class and benzodiazepines are the second and third most prescribed and dispensed controlled substances.

**Table 6.2 – Number of prescriptions dispensed by prescriber specialty and drug class**

<b>Specialty</b>	<b>Benzo</b>	<b>Opioid</b>	<b>Muscle Relaxant</b>	<b>Stimulant</b>	<b>Sedative</b>	<b>^No CDC Class</b>	<b>Total</b>
Dentist	45,844	284,913	83	245	148	23,318	354,551
Hematology	968	5,084	4	38	233	1,179	7,506
Medical Doctor	1,465,608	2,427,820	8,531	921,679	590,445	2,046,531	7,460,614
Oncology	12,903	52,329	6	1,981	2,952	14,858	85,029
Pain Management	6,129	185,280	283	968	2,129	35,957	230,746
Palliative Care	2,397	6,146	2	104	74	4,107	12,830
Substance Use Disorder	779	15,855	2	1,204	82	5,571	23,493
Veterinary	17,420	35,667	0	56	26	116,988	170,157
+Other	1,464,531	3,319,085	6,538	1,287,035	408,613	2,217,463	8,703,265
Unspecified	8,060	15,232	22	3,630	1,845	23,276	52,065
<b>Total</b>	<b>3,024,639</b>	<b>6,347,411</b>	<b>15,471</b>	<b>2,216,940</b>	<b>1,006,547</b>	<b>4,489,248</b>	<b>17,100,256</b>

^No CDC Class – The Center for Disease Control (CDC) does not have a classification on file for the drug  
 +Specialty other than those in this list (e.g., Nurse Practitioner, Prescribing Pharmacist, et. al.)

## Summary and Discussion

In 2020, 17 million dispensed controlled substance prescriptions were entered into the North Carolina Controlled Substances Reporting System. This is a significant decline from previous years and may be indicative of a change in health seeking behavior in 2020 due to the COVID19 pandemic. Typically, the CSRS shows a steady but small decrease in the number of dispensed controlled substances by quarter and year. Although not shown here, the CSRS shows that in Quarter 2, 2020, there were 332,391 fewer dispensed controlled substance prescriptions compared to Quarter 1. In 2019, the difference between the quarters was 48,556 fewer dispensed prescriptions. The significant decrease observed between April and June of 2020 coincides with the timing of the Governor's Stay at Home orders and is consistent with observations nationwide. Survey results published by the CDC found that 40.9% of adults in the US had avoided medical care, both urgent and routine, because of concerns about COVID-19. The survey was conducted in June 2020<sup>3</sup>.

The North Carolina Controlled Substances Reporting System was accessed by 46,268 practitioners and pharmacists in 2020. This is slightly lower compared to 2019, when just over 46,300 practitioners and pharmacists accessed prescription histories and other clinical diagnosis tools to assist in prescribing and dispensing decisions.

DHHS will continue to work toward increasing the number of practitioners and pharmacists accessing the system, with a focus on increasing technical integrations into clinical workflows and targeted engagement activities to keep the sector informed of resources and updates.

The decline in the total number of prescribed substances dispensed in 2020 compared to 2019 indicates some progress in achieving goals established in the *North Carolina Department of Health and Human Services 2021-2023 Strategic Plan*. Goal #4 *Turn the tide on North Carolina's opioid and substance use crisis*, measures the number of people receiving prescribed opioids as a metric for success. This position is supported by the decrease in the number of patients that received prescription opioids. The challenge for the State is to ensure that the behavioral and health related crisis emerging from the COVID19 pandemic does not reverse these trends. The CSRS plays a key role in providing the medical community with accurate and up to date information on prescribing trends to encourage clinical decision making that will ultimately result in fewer targeted controlled substances circulating in the community. Future reports will continue to measure the reduction expected in the total number of opioid prescriptions dispensed.

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<sup>3</sup> Czeisler MÉ, Marynak K, Clarke KEN, et al. Delay or Avoidance of Medical Care Because of COVID-19-Related Concerns - United States, June 2020. MMWR Morb Mortal Wkly Rep. 2020;69(36):1250-1257. Published 2020 Sep 11. doi:10.15585/mmwr.mm6936a4



# **2022 Controlled Substances Reporting System Annual Report**

**NC GS 90-113.75B**

**Amended by Session Law 2017-74, Section 12**



**Report to the**

**Joint Legislative Oversight Committee on Health and Human Services**

**North Carolina Medical Board**

**North Carolina Board of Podiatry Examiners**

**North Carolina Board of Nursing**

**North Carolina Dental Board**

**North Carolina Veterinary Medical Board**

**North Carolina Board of Pharmacy**

**By**

**North Carolina Department of Health and Human Services**

**June 8, 2022**

## **INTRODUCTION**

*G.S. § 90-113.75B Annually on February 1, beginning February 1, 2019, the Department shall report to the Joint Legislative Oversight Committee on Health and Human Services, the North Carolina Medical Board, the North Carolina Board of Podiatry Examiners, the North Carolina Board of Nursing, the North Carolina Dental Board, the North Carolina Veterinary Medical Board, and the North Carolina Board of Pharmacy on data reported to the controlled substances reporting system.*

## **BACKGROUND**

G.S. § 90-113.75B requires an annual report to the General Assembly and licensing boards (as specified in the introduction above) to be delivered on February 1<sup>st</sup> of each year beginning in 2019. The report must include at least all of the following information about targeted controlled substances reported to the system during the preceding calendar year:

- (1) The total number of prescriptions dispensed, broken down by Schedule.
- (2) Demographics about the ultimate users to whom prescriptions were dispensed.
- (3) Statistics regarding the number of pills dispensed per prescription.
- (4) The number of ultimate users who were prescribed a controlled substance by two or more practitioners.
- (5) The number of ultimate users to whom a prescription was dispensed in more than one county.
- (6) The categories of practitioners prescribing controlled substances and the number of prescriptions authorized by each category of practitioner. For the purpose of this subdivision, medical doctors, surgeons, palliative care practitioners, oncologists and other practitioners specializing in oncology, pain management practitioners, practitioners who specialize in hematology, including the treatment of sickle cell disease, and practitioners who specialize in treating substance use disorder shall be treated as distinct categories of practitioners.
- (7) Any other data deemed appropriate and requested by the Joint Legislative Oversight Committee on Health and Human Services, the North Carolina Medical Board, the North Carolina Board of Podiatry Examiners, the North Carolina Board of Nursing, the North Carolina Dental Board, the North Carolina Veterinary Medical Board, or the North Carolina Board of Pharmacy.

## **DATA COLLECTION AND EXPLANATORY NOTES**

Pharmacies in North Carolina are responsible for submitting data on any Schedule II-V controlled substances they dispense no later than the close of the next business day after the prescription is delivered. The data comes in a standard American Society for Automation in Pharmacy (ASAP) format, which includes details on the transaction such as the patient, prescriber, and pharmacy.

The quality of the prescription data is dependent on the accuracy of pharmacist submissions. Prescriptions are constantly being added and modified within the system, so the values in this report will change slightly with time. Prescriber specialty (Exhibit 6) is based on self-reported specialties in the National Plan and Provider Enumeration System (NPPES), the Drug Enforcement Agency (DEA), the North Carolina Medical Board, and the Controlled Substances Reporting System (CSRS).

On March 27, 2020 Governor Roy Cooper issued Executive Order 121, a statewide, 30 day Stay at Home order to help stop the spread of the novel coronavirus COVID19. It is after this date that significant decreases in the number of controlled substances dispensed was observed within the Controlled Substances Reporting System indicating a change in health seeking behavior as a result of the COVID-19 pandemic. Throughout 2021, North Carolina remained in a state of emergency due to the pandemic.

## EXHIBITS AND NOTES

### Exhibit 1: Prescriptions by Schedule

In total, 16,529,272 controlled substance prescriptions were dispensed in 2021<sup>1</sup>. In 2020, 17,100,256 prescriptions for controlled substances were dispensed. This is a 3% decrease. There has been a decline in the dispensation of all controlled substances for human patients. The largest decline has been seen in the number of Schedule IV controlled substances dispensed. Schedule II controlled substances were the most dispensed in 2021, accounting for 46% of all controlled substance dispensations. Compared to 2020, the number of Schedule II controlled substances dispensed remained similar to the previous year and accounts for a slightly higher percentage of all controlled substances dispensed. This is followed by prescription dispensations in Schedule IV, accounting for 40% of all controlled substance prescriptions dispensed. The most common type of drugs in Schedule II and Schedule IV are opioids and benzodiazepines respectively. See Exhibit 6 for further information.

In 2021, the proportion of human prescriptions listed as uncategorized was 0.8%, slightly lower than the previous year (1%). The proportion of veterinary prescriptions listed as uncategorized was 15%, lower than the proportion reported in 2020 (17%). This can be attributed to a variety of systemic factors such as the formal classification of new products and improved data systems to capture information.

**Table 1.1 - Total Prescriptions by Schedule in 2021**

Schedule	Human Rx	Veterinary Rx	Total
II	7,533,387	19,744	7,553,131
III	1,320,837	2,424	1,323,261
IV	6,683,991	104,391	6,788,382
V	700,313	1,968	702,281
Data Missing	138,656	23,561	162,217
Total	16,377,184	152,088	16,529,272

Schedule II substances are currently recognized for medical use but have a high potential for abuse, which may lead to severe psychological or physical dependence. Examples include Hydrocodone, Oxycodone, Fentanyl, Amphetamine Salts and Cocaine.

Schedule III substances have a potential for abuse that is less than schedule II and may lead to moderate dependence. Examples include Buprenorphine, Ketamine, Tylenol with codeine, testosterone, and anabolic steroids.

Schedule IV substances have a lower potential for abuse compared to schedule III. Examples include benzodiazepines such as alprazolam (Xanax®), carisoprodol (Soma®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®).

Schedule V substances have lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics and are generally used for antidiarrheal, antitussive, and analgesic (pain relief) purposes. Examples include Robitussin AC, Lomotil, and Lyrica.

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<sup>1</sup> This data is accurate as of 15 January 2022. Some variation may occur due to late submissions.

## **Exhibit 2: Demographics**

The data has been aggregated by two demographic categories: Counties (Table 2.1) and Age Group and Gender (Table 2.2). These tables contain a combination of human and veterinary prescriptions due to the small numbers in the veterinary category. This count of unique patients may differ from the sum of all categories because patients may have moved between counties during the reporting period causing them to be indicated in more than one county.

It is noted that Mecklenburg and Perquimans have the smallest controlled substance prescription per patient ratio of all North Carolina counties (4.96 and 4.92 prescriptions per patient respectively) and Alexander has the highest (7.40) See Table 2.1 below. Swain has the highest rate of prescriptions per 1,000 residents (2841.36 per 1,000).

***Table 2.1 - Number of Controlled Substance Prescriptions Dispensed by County of Patient Residence in 2021***

<b>NC County</b>	<b>Prescriptions</b>	<b>Patients</b>	<b>Rx per Patient</b>	<b>Rx per 1,000 population</b>
Alamance	239,141	42,888	5.58	1,352.32
Alexander	79,663	10,769	7.40	2,043.48
Alleghany	19,738	3,316	5.95	1,708.18
Anson	31,087	6,078	5.11	1,229.32
Ashe	53,085	7,946	6.68	1,868.07
Avery	33,022	5,316	6.21	1,831.81
Beaufort	108,100	15,167	7.13	2,275.93
Bertie	29,366	5,310	5.53	1,498.11
Bladen	56,908	8,504	6.69	1,654.78
Brunswick	266,321	43,552	6.12	1,781.32
Buncombe	406,912	66,370	6.13	1,506.86
Burke	167,189	24,075	6.94	1,811.99
Cabarrus	324,751	54,581	5.95	1,473.21
Caldwell	184,622	26,334	7.01	2,195.29
Camden	13,104	2,412	5.43	1,212.44
Carteret	142,690	21,035	6.78	1,978.48
Caswell	19,497	2,985	6.53	823.84
Catawba	334,303	50,452	6.63	2,069.78
Chatham	66,914	11,722	5.71	842.36
Cherokee	65,915	9,075	7.26	2,175.63
Chowan	19,595	3,866	5.07	1,397.55
Clay	24,693	3,696	6.68	2,015.92
Cleveland	219,201	32,465	6.75	2,176.71
Columbus	124,935	17,641	7.08	2,222.25
Craven	185,752	29,672	6.26	1,783.44

NC County	Prescriptions	Patients	Rx per Patient	Rx per 1,000 population
Cumberland	459,863	78,952	5.82	1,377.86
Currituck	27,498	4,847	5.67	968.96
Dare	63,186	10,566	5.98	1,671.19
Davidson	264,325	41,052	6.44	1,534.15
Davie	84,545	13,163	6.42	1,898.61
Duplin	69,913	12,633	5.53	1,169.56
Durham	320,764	62,369	5.14	987.27
Edgecombe	75,150	13,477	5.58	1,436.66
Forsyth	582,150	102,307	5.69	1,505.89
Franklin	89,944	15,636	5.75	1,261.33
Gaston	493,188	68,863	7.16	2,194.70
Gates	9,556	1,743	5.48	784.05
Graham	18,601	2,598	7.16	2,140.75
Granville	70,201	11,893	5.90	1,116.30
Greene	20,084	3,594	5.59	954.15
Guilford	757,837	136,676	5.54	1,374.50
Halifax	80,233	13,308	6.03	1,589.37
Harnett	177,488	27,915	6.36	1,272.52
Haywood	123,657	18,419	6.71	1,923.13
Henderson	190,752	32,006	5.96	1,575.06
Hertford	29,765	5,123	5.81	1,239.74
Hoke	56,493	9,912	5.70	994.24
Hyde	7,229	1,165	6.21	1,407.79
Iredell	352,523	55,660	6.33	1,888.53
Jackson	59,597	9,380	6.35	1,313.75
Johnston	263,910	44,217	5.97	1,207.32
Jones	21,082	3,263	6.46	2,067.67
Lee	119,404	19,160	6.23	1,894.73
Lenoir	84,147	15,357	5.48	1,514.63
Lincoln	164,220	26,003	6.32	1,833.88
Macon	54,982	9,871	5.57	1,474.36
Madison	34,450	5,521	6.24	1,492.38
Martin	43,625	6,809	6.41	1,902.78
McDowell	81,753	12,783	6.40	1,732.75
Mecklenburg	1,218,207	245,760	4.96	1,053.71
Mitchell	32,556	4,451	7.31	2,131.74
Montgomery	35,608	6,311	5.64	1,282.94

NC County	Prescriptions	Patients	Rx per Patient	Rx per 1,000 population
Moore	147,789	26,582	5.56	1,411.51
Nash	145,199	24,571	5.91	1,509.97
New Hanover	405,883	65,676	6.18	1,670.39
Northampton	24,447	4,502	5.43	1,214.64
Onslow	270,647	42,311	6.40	1,308.43
Orange	185,169	33,396	5.54	1,233.43
Pamlico	17,743	2,987	5.94	1,334.16
Pasquotank	52,725	10,103	5.22	1,329.59
Pender	109,639	16,973	6.46	1,668.02
Perquimans	17,266	3,510	4.92	1,265.28
Person	61,835	10,201	6.06	1,520.00
Pitt	281,078	45,202	6.22	1,542.03
Polk	26,827	4,418	6.07	1,219.02
Randolph	207,822	34,127	6.09	1,416.66
Richmond	95,467	13,669	6.98	2,125.98
Robeson	259,578	38,287	6.78	1,996.71
Rockingham	190,222	27,776	6.85	2,071.03
Rowan	248,572	37,128	6.70	1,730.59
Rutherford	138,656	19,573	7.08	1,997.00
Sampson	98,519	16,463	5.98	1,524.87
Scotland	67,599	9,855	6.86	1,895.55
Stanly	115,742	18,419	6.28	1,787.71
Stokes	99,724	14,473	6.89	2,153.35
Surry	155,946	23,361	6.68	2,129.45
Swain	39,691	5,526	7.18	2,841.36
Transylvania	63,841	9,719	6.57	1,768.40
Tyrrell	4,851	877	5.53	1,138.73
Union	319,918	58,752	5.45	1,287.76
Vance	67,505	11,397	5.92	1,458.31
Wake	1,431,992	273,442	5.24	1,266.34
Warren	17,633	3,290	5.36	891.64
Washington	19,659	3,410	5.77	1,651.46
Watauga	55,576	9,544	5.82	933.09
Wayne	161,725	29,931	5.40	1,269.55
Wilkes	131,579	19,647	6.70	1,859.09
Wilson	122,604	20,666	5.93	1,475.13
Yadkin	80,394	11,781	6.82	2,100.65

NC County	Prescriptions	Patients	Rx per Patient	Rx per 1,000 population
Yancey	34,584	5,215	6.63	1,823.86
Out of State	688,958	156,207	4.41	N/A
Unspecified	9,678	1,857	5.21	N/A
Total	16,529,272	2,822,643	5.86	1,537.11

*Table 2.2- Summary of North Carolina Dispensing Metrics in 2020 and 2021*

Dispensing Metrics	2020			2021		
	Lowest Value	Highest Value	Total	Lowest Value	Highest Value	Total
Prescriptions	5,047	1,410,660	16,434,251	4,851	1,431,992	15,840,314
Patients	904	263,578	2,675,404	877	273,442	2,666,607
Rx per patient	5.04	8.05	6.14	4.92	7.40	5.94

The information in Table 2.2 excludes Out of State prescriptions and patients. There was an over-all decrease in the number of prescriptions, the number of patients receiving prescriptions, and the prescriptions per patient from 2020 to 2021.

**Table 2.3- Number of Prescriptions Dispensed by Age and Gender**

Age Range	Male	Female	Unknown	Total
0-9	242,932	123,333	6,035	372,300
10-19	528,274	378,846	5,894	913,014
20-29	425,076	677,881	4,425	1,107,382
30-39	785,195	1,310,220	6,462	2,101,877
40-49	932,607	1,638,117	7,368	2,578,092
50-59	1,282,909	2,041,984	9,224	3,334,117
60-69	1,333,781	1,931,005	6,905	3,271,691
70-79	798,884	1,190,861	3,389	1,993,134
80+	275,747	580,307	1,565	857,619
Unknown	1	5	40	46
Total	6,605,406	9,872,559	51,307	16,529,272

The highest volume of controlled substance prescriptions dispensed occur from age 30 to 69. The steepest increase occurs between the age groups 20-29 and 30-39. The number of controlled substance prescriptions dispensed continues to increase from that point up until 60-69, after which the numbers significantly decline. Compared to 2020, the number of controlled substance prescriptions dispensed in these age ranges decreased significantly. By gender, females have a higher number of dispensed prescriptions for controlled substances than males from the 20-29 age group onwards.



### **Exhibit 3: Pill Statistics**

The classification of controlled substance with the highest number of prescriptions dispensed in 2021 was Opioids followed by a category called No CDC Class (e.g., Phentermine, Pregabalin, Testosterone), and then Benzodiazepines. (Table 3.1 below). No CDC Class denotes that the Center for Disease Control does not have a classification on file for the drug in question. Most controlled substance prescriptions (47%) are dispensed in quantities of 30 pills or less. Opioids remain the most dispensed controlled substance in all quantity ranges.

***Table 3.1 – Pill Quantity by Classification***

<b>Quantity Range</b>	<b>Benzo</b>	<b>Muscle Relaxant</b>	<b>Opioid</b>	<b>Sedative</b>	<b>Stimulant</b>	<b>No CDC Class</b>	<b>Total</b>
1-30	1,294,852	1,655	2,208,912	793,459	1,486,704	2,123,666	7,909,248
31-60	781,405	1,364	1,101,639	24,331	379,951	1,112,333	3,401,023
61-90	430,930	1,732	846,106	74,708	132,433	645,731	2,131,640
91-120	83,560	415	868,407	190	18,657	194,562	1,165,791
121-150	11,223	39	118,020	565	3,825	23,653	157,325
151-180	28,774	96	165,972	635	10,367	81,706	287,550
181+	13,898	115	67,398	34	3,208	44,459	129,112
Not Pills	22,358	0	352,114	156	15,964	956,906	1,347,498
Data Missing	8	0	37	2	2	36	85
<b>Total</b>	<b>2,667,008</b>	<b>5,416</b>	<b>5,728,605</b>	<b>894,080</b>	<b>2,051,111</b>	<b>5,183,052</b>	<b>16,529,272</b>

<sup>a</sup>No CDC Class – The Center for Disease Control (CDC) does not have a classification on file for the drug

#### **Exhibit 4: Patients with Multiple Prescribers**

The data indicates that 57.11% of patients saw one prescriber for their dispensed controlled substances. This is like the percentage noted in 2020 data (54.38%). Pet and animal owners were more likely to receive controlled substance prescriptions for their animals from one veterinarian.

**Table 4.1 Prescriber counts (human patients)**

Prescribers	Patients	Percentage
1	1,573,138	57.11%
2	634,160	23.02%
3	285,379	10.36%
4	133,261	4.84%
5	64,182	2.33%
6	31,195	1.13%
7	15,730	0.57%
8	8,080	0.29%
9	4,175	0.15%
10+	5,310	0.19%
Total	2,754,610	100.00%

**Table 4.2 Prescriber counts (Veterinary)**

Prescribers	Patients	Percentage
1	59,727	86.15%
2	7,351	10.60%
3	1,751	2.53%
4	401	0.58%
5	81	0.12%
6	14	0.02%
7	3	0.00%
8	0	0.00%
9	1	0.00%
10+	2	0.00%
Total	69,331	100.00%

#### **Exhibit 5: Patients with Multiple County Dispensing**

The largest percentage of patients had controlled substance prescriptions dispensed in only one county (Tables 5.1 and 5.2 below). There is little change in this pattern compared to 2020.

**Table 5.1 - Dispenser Counties  
(Human patients)**

Counties	Patients	Percentage
1	2,507,007	91.01%
2	219,897	7.98%
3	24,720	0.90%
4	2,624	0.10%
5	299	0.01%
6	52	0.00%
7	7	0.00%
8	2	0.00%
9	1	0.00%
10+	1	0.00%
Total	2,754,610	100.00%

**Table 5.2 - Dispenser Counties  
(Veterinary patients)**

Counties	Patients	Percentage
1	69,026	99.56%
2	298	0.43%
3	7	0.01%
4	0	0.00%
5	0	0.00%
6	0	0.00%
7	0	0.00%
8	0	0.00%
9	0	0.00%
10+	0	0.00%
Total	69,331	100.00%

**Exhibit 6: The categories of practitioners prescribing controlled substances and the number of prescriptions authorized by each category of practitioner**

Of the identified specialties, the largest categories for both controlled substance prescriptions and patients are *Other* followed by *Medical Doctor* (Table 6.1 below). These two specialties account for 51% and 44% of all controlled substances prescribed and dispensed. Dentists are the third most frequent prescribers of controlled substances.

Of the identified specialties, Substance Use Disorder<sup>2</sup> and Pain Management provide the highest prescription rate per patient compared to other specialties. Dentists have the lowest rate of prescriptions per patient.

***Table 6.1 – Number of controlled substance prescriptions dispensed by prescriber specialty***

Specialty	Prescriptions	Patients	Rx per Patient
Dentist	341,244	264,037	1.29
Hematology	5,754	1,629	3.53
Medical Doctor	6,709,635	1,363,110	4.92
Oncology	72,778	21,332	3.41
Pain Management	270,948	49,255	5.50
Palliative Care	24,859	7,169	3.47
Substance Use Disorder	35,998	5,078	7.09
Veterinary	150,491	68,877	2.18
Other+	8,754,890	1,683,015	5.20
Unspecified	162,675	48,455	3.36
<b>Total*</b>	<b>16,529,272</b>	<b>2,822,643</b>	<b>5.86</b>

+Specialty other than those in this list (e.g., Nurse Practitioner, Prescribing Pharmacist, et. al.)

\*This is the total of unique patients and differs from the sum of all categories because unique patients may see more than one practitioner specialty.

Opioids remain the most prescribed and dispensed controlled substance across all specialties except Veterinary. Controlled substances with No CDC Class and benzodiazepines are the second and third most prescribed and dispensed controlled substances (Table 6.2).

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<sup>2</sup> The classification of Substance Use Disorder specialty contains data from prescriptions dispensed at a pharmacy by a patient and does not include data from Substance Use Treatment services that dispense medications on site or less than 48 hours supply.

**Table 6.2 – Number of prescriptions dispensed by prescriber specialty and drug class**

<b>Specialty</b>	<b>Benzo</b>	<b>Opioid</b>	<b>Muscle Relaxant</b>	<b>Stimulant</b>	<b>Sedative</b>	<b>No CDC Class<sup>^</sup></b>	<b>Total</b>
Dentist	44,388	242,745	28	66	83	53,934	341,244
Hematology	622	3,770	0	46	200	1,116	5,754
Medical Doctor	1,212,803	2,003,121	2,385	787,695	498,772	2,204,859	6,709,635
Oncology	10,119	44,505	2	484	2,224	15,444	72,778
Pain Management	9,461	200,924	304	1,919	2,390	55,950	270,948
Palliative Care	4,834	13,779	1	201	292	5,752	24,859
Substance Use Disorder	2,082	19,545	2	3,143	392	10,834	35,998
Veterinary	14,237	23,221	0	110	39	112,884	150,491
Other <sup>+</sup>	1,343,218	3,126,553	2,643	1,242,557	380,722	2,659,197	8,754,890
Unspecified	25,244	50,442	51	14,890	8,966	63,082	162,675
<b>Total</b>	<b>2,667,008</b>	<b>5,728,605</b>	<b>5,416</b>	<b>2,051,111</b>	<b>894,080</b>	<b>5,183,052</b>	<b>16,529,272</b>

<sup>^</sup>No CDC Class – The Center for Disease Control (CDC) does not have a classification on file for the drug

<sup>+</sup>Specialty other than those in this list (e.g., Nurse Practitioner, Prescribing Pharmacist, et. al.)

## Summary and Discussion

In 2021, 16 million dispensed controlled substance prescriptions were entered into the North Carolina Controlled Substances Reporting System. This is another significant decline compared to previous years.

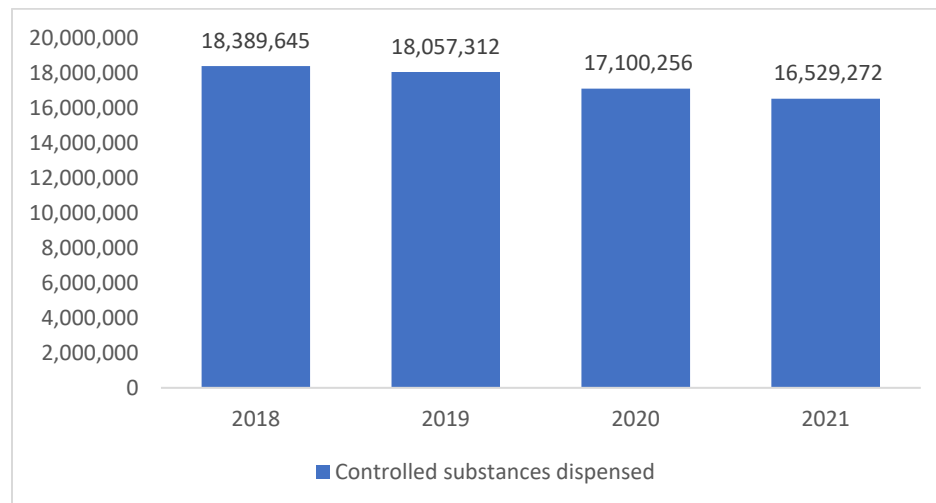


Figure 1 Annual trend in controlled substances dispensed

The 2020 annual report stated that the first significant observed decrease occurred between April and June of 2020. This coincided with the timing of the Governor's Stay at Home orders and is consistent with observations nationwide. Survey results published by the CDC found that 40.9% of adults in the US had avoided medical care, both urgent and routine, because of concerns about COVID-19. The survey was conducted in June 2020<sup>3</sup>. Despite an observed return to prescribing levels in the last half of 2020, this report indicates a significant drop in the number of dispensed prescriptions throughout 2021.

The North Carolina Controlled Substances Reporting System was accessed by 52,824 practitioners and pharmacists. This is slightly higher compared to 2020, when just over 46,200 practitioners and pharmacists accessed prescription histories and other clinical diagnosis tools to assist in prescribing and dispensing decisions.

Mandatory use legislation for the search of patient histories prior to prescribing targeted controlled substances became effective in July 2021. One audit of compliance was completed in October 2021. Quarterly audits will continue to be completed throughout 2022 and the results will be reported in the next legislative annual report. Work will continue in 2022 to increase the number of practitioners and pharmacists accessing the system, with a focus on increasing technical integrations into clinical workflows and targeted engagement activities to keep the sector informed of resources and updates.

The continued decline in the total number of prescribed substances dispensed from 2021 to 2022 indicates some progress in achieving goals established in the *NC Department of Health and Human Services 2021-2023 Strategic Plan*. Goal #4 *Turn the tide on North Carolina's opioid and substance use crisis*, measures the number of people receiving prescribed opioids as a metric for success. This position is supported by the

<sup>3</sup> Czeisler MÉ, Marynak K, Clarke KEN, et al. Delay or Avoidance of Medical Care Because of COVID-19-Related Concerns - United States, June 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(36):1250-1257. Published 2020 Sep 11. doi:10.15585/mmwr.mm6936a4

decrease in opioid dispensing. The challenge for the state is to ensure that the behavioral and health related crisis emerging from the COVID19 pandemic does not reverse these trends.

The CSRS plays a key role in providing the medical community with accurate and up to date information on prescribing trends to encourage clinical decision making that will ultimately result in fewer targeted controlled substances circulating in the community. DHHS now provides prescribers with detailed quarterly trend reports on their own prescribing patterns. In addition, the implementation of the mandatory use statute, which requires searching prescription histories for all patients receiving a new targeted controlled substance prescription and every subsequent three months that substance is prescribed is predicted to have a positive impact on prescribing trends. Future reports will continue to measure the reduction expected in the total number of opioid prescriptions dispensed.