

Accessible version: <https://www.cdc.gov/antibiotic-use/data/report-2020.html>

## Outpatient Antibiotic Prescriptions — United States, 2020

*Citation: Centers for Disease Control and Prevention. Outpatient antibiotic prescriptions — United States, 2020.*

### Data Sources:

Systemic oral antibiotics were extracted from the IQVIA Xponent database. IQVIA captured an estimated 92% of outpatient prescriptions dispensed\* from retail pharmacies for any medication nationally, reconciled them to wholesale deliveries to these pharmacies, and projected to 100% coverage. These data represent all outpatient antibiotic prescriptions from community pharmacies from all payers but exclude federal facilities. Provider specialties are taken from the American Medical Association (AMA) self-designated practice specialties, DEA and NPI sources and categorized into one of 17 groups. Population data were obtained from the U.S. Census bridging files.

### Total outpatient oral antibiotic prescriptions in 2020

Healthcare providers prescribed **201.9 million antibiotic prescriptions**—equivalent to **613 antibiotic prescriptions per 1000 persons**.

**Table 1. Oral antibiotic prescriptions by age, sex and region—United States, 2020**

<b>Characteristics Age group<sup>a</sup></b>	<b>Number of Antibiotic Prescriptions (Millions)</b>	<b>Antibiotic Prescriptions Per 1,000 Persons, Rate</b>
<20	33.3	389
>=20	168.4	690
<b>Characteristics Sex<sup>a</sup></b>	<b>Number of Antibiotic Prescriptions (Millions)</b>	<b>Antibiotic Prescriptions Per 1,000 Persons, Rate</b>
Male	76.8	473
Female	125	747
<b>Characteristics Region<sup>a</sup></b>	<b>Number of Antibiotic Prescriptions (Millions)</b>	<b>Antibiotic Prescriptions Per 1,000 Persons, Rate</b>
Northeast	35.5	636
Midwest	42.8	627
South	88.5	698
West	34.9	444

<sup>a</sup>Totals may not add to all oral prescriptions (201.9 million) due to missing data

**Table 2. Top oral antibiotic classes and agents—United States, 2020**

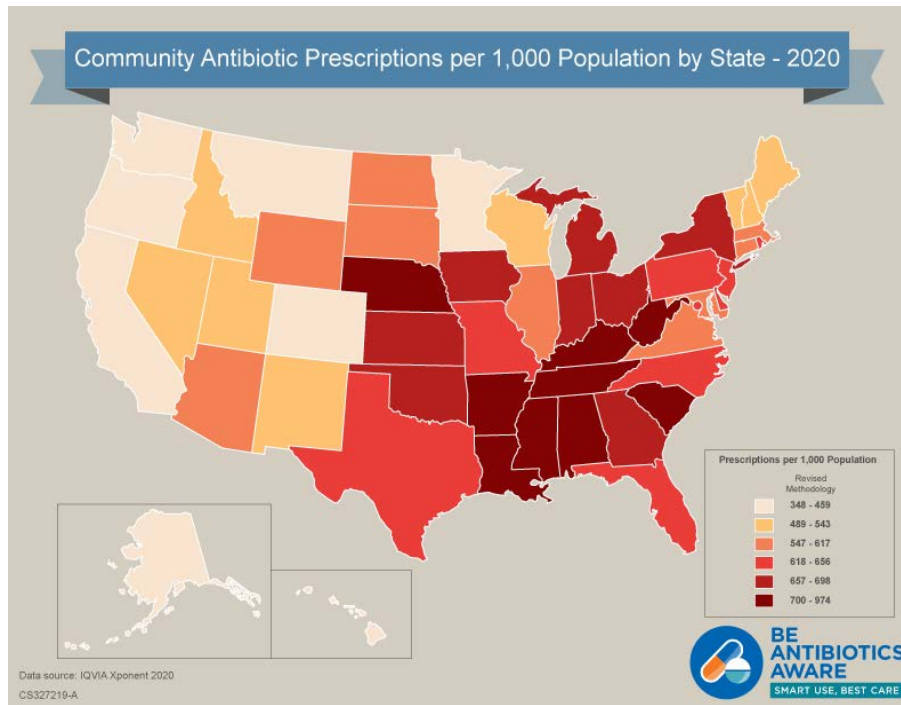
<b>Characteristics: Antibiotic class</b>	<b>Number of Antibiotic Prescriptions (Millions)</b>	<b>Antibiotic Prescriptions Per 1,000 Persons, Rate</b>
Penicillins	43.2	131
Cephalosporins	30.2	92
Macrolides	29	88
Tetracycline	22.7	69
B-lactams, increased activity	21	64
<b>Characteristics: Antibiotic agent</b>	<b>Number of Antibiotic Prescriptions (Millions)</b>	<b>Antibiotic Prescriptions Per 1,000 Persons, Rate</b>
Amoxicillin	39.3	119
Azithromycin	27.6	84
Amoxicillin\clavulanic acid	21	64
Cephalexin	19.6	60
Doxycycline	19.5	59

**Table 3. Oral antibiotic prescribing by provider specialty — United States, 2020**

Provider Specialty	Number of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per Provider, Rate
Primary Care Physicians	64.1	270
Physician Assistants & Nurse Practitioners	62.3	360
Surgical Specialties	15.3	172
Dentistry	23.4	191
Emergency Medicine	9.5	295
Dermatology	5.6	496
Obstetrics/Gynecology	4.6	123
Other	17.0	82
All Providers <sup>a</sup>	201.9	221

<sup>a</sup>Total may not add to all oral prescriptions (201.9 million) due to rounding.

**Figure 1. Antibiotic prescriptions per 1000 persons by state (sextiles) for all ages — United States, 2020.**



*This project was made possible through a partnership with the CDC Foundation. Support for this project was provided by The Pew Charitable Trusts.*

<b>State</b>	<b>Number of prescriptions per 1,000 persons, Rate</b>
<b>Alabama</b>	922
<b>Alaska</b>	348
<b>Arizona</b>	547
<b>Arkansas</b>	844
<b>California</b>	421
<b>Colorado</b>	418
<b>Connecticut</b>	617
<b>Delaware</b>	618
<b>District of Columbia</b>	627
<b>Florida</b>	656
<b>Georgia</b>	682
<b>Hawaii</b>	420
<b>Idaho</b>	506
<b>Illinois</b>	606
<b>Indiana</b>	680
<b>Iowa</b>	665
<b>Kansas</b>	690
<b>Kentucky</b>	887
<b>Louisiana</b>	920
<b>Maine</b>	517
<b>Maryland</b>	562
<b>Massachusetts</b>	548
<b>Michigan</b>	657
<b>Minnesota</b>	455
<b>Mississippi</b>	956
<b>Missouri</b>	644
<b>Montana</b>	459

<b>Nebraska</b>	718
<b>Nevada</b>	538
<b>New Hampshire</b>	543
<b>New Jersey</b>	656
<b>New Mexico</b>	519
<b>New York</b>	675
<b>North Carolina</b>	625
<b>North Dakota</b>	547
<b>Ohio</b>	698
<b>Oklahoma</b>	675
<b>Oregon</b>	398
<b>Pennsylvania</b>	647
<b>Rhode Island</b>	635
<b>South Carolina</b>	700
<b>South Dakota</b>	612
<b>Tennessee</b>	842
<b>Texas</b>	637
<b>Utah</b>	541
<b>Vermont</b>	489
<b>Virginia</b>	591
<b>Washington</b>	397
<b>West Virginia</b>	974
<b>Wisconsin</b>	498
<b>Wyoming</b>	586