

Accessible version: <https://www.cdc.gov/antibiotic-use/data/report-2021.html>

## Outpatient Antibiotic Prescriptions — United States, 2021

*Citation: Centers for Disease Control and Prevention. Outpatient antibiotic prescriptions — United States, 2021*

### Data Source:

Systemic oral antibiotics were extracted from the IQVIA Xponent database. IQVIA captured an estimated 93% 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. 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 files.

### Total outpatient oral antibiotic prescriptions in 2021

Healthcare professionals prescribed 211.1 million antibiotic prescriptions—equivalent to 636 antibiotic prescriptions per 1000 persons.

**Table 1a. Oral antibiotic prescriptions by age, sex and region — United States, 2021 (Age Groups<sup>a</sup>)**

Characteristics	Number Of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per 1,000 Persons,Rate
<20	37.2	601
>=20	173.7	643

<sup>a</sup>Totals may not add to all oral prescriptions (211.1 million) due to missing data

**Table 1b. Oral antibiotic prescriptions by age, sex and region — United States, 2021 (Sex<sup>a</sup>)**

Characteristics	Number Of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per 1,000 Persons,Rate
Male	80.7	491
Female	130.1	777

<sup>a</sup>Totals may not add to all oral prescriptions (211.1 million) due to missing data

**Table 1c. Oral antibiotic prescriptions by age, sex and region — United States, 2021 (Region<sup>a</sup>)**

Characteristics	Number Of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per 1,000 Persons,Rate
Northeast	35.8	627
Midwest	44.3	643
South	96.1	756
West	34.7	441

<sup>a</sup>Totals may not add to all oral prescriptions (211.1 million) due to missing data

**Table 2a. Top oral antibiotic classes and agents — United States, 2021 (Antibiotic Class)**

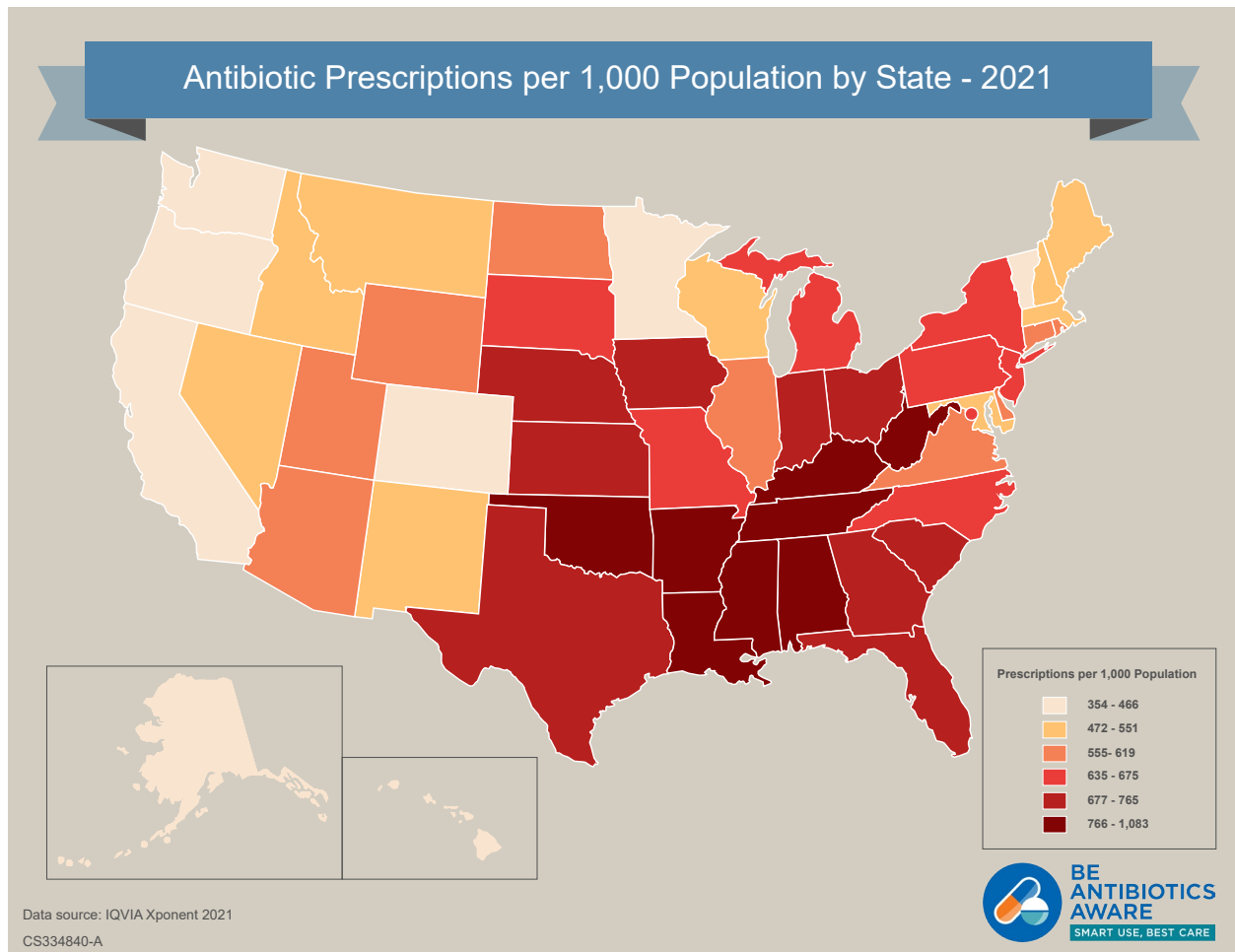
Characteristics	Number Of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per 1,000 Persons,Rate
Penicillins	46.4	140
Cephalosporins	31.4	95
Macrolides	29.9	90
Tetracycline	25.0	75
B-lactams, increased activity	22.6	68

**Table 2b. Top oral antibiotic classes and agents — United States, 2021 (Antibiotic agent)**

Characteristics	Number Of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per 1,000 Persons,Rate
Amoxicillin	42.9	129
Azithromycin	28.7	86
Amoxicillin clavulanic acid	22.6	68
Doxycycline	21.7	65
Cephalexin	20.5	62

**Table 3. Oral antibiotic prescribing by specialty — United States, 2021**

Specialty	Number Of Antibiotic Prescriptions (Millions)	Antibiotic Prescriptions Per Healthcare Professional, Rate
Primary Care Physicians	61.2	258
Physician Assistants & Nurse Practitioners	69.8	403
Surgical Specialties	16.3	183
Dentistry	25.5	208
Emergency Medicine	10.7	332
Dermatology	5.7	505
Obstetrics/Gynecology	4.6	122
Other	17.1	82
All Healthcare Professionals	211.1	231



**Table 4.Oral antibiotic prescribing by state — United States, 2021**

State	Antibiotic Prescriptions Per 1,000 Persons, Rate
Alabama	985
Alaska	354
Arizona	566
Arkansas	927
California	411
Colorado	425
Connecticut	605
Delaware	619
District of Columbia	673
Florida	721
Georgia	749
Hawaii	392
Idaho	514
Illinois	604
Indiana	701
Iowa	677
Kansas	724
Kentucky	938
Louisiana	1015
Maine	508
Maryland	551
Massachusetts	545
Michigan	675
Minnesota	466
Mississippi	1083

**Table 4. Oral antibiotic prescribing by state — United States, 2021 (Continued)**

State	Antibiotic Prescriptions Per 1,000 Persons, Rate
Missouri	675
Montana	472
Nebraska	760
Nevada	540
New Hampshire	538
New Jersey	635
New Mexico	530
New York	666
North Carolina	644
North Dakota	581
Ohio	718
Oklahoma	766
Oregon	387
Pennsylvania	643
Rhode Island	600
South Carolina	765
South Dakota	670
Tennessee	904
Texas	708
Utah	555
Vermont	460
Virginia	592
Washington	389
West Virginia	1022
Wisconsin	502
Wyoming	619