OUTPATIENT ANTIBIOTIC PRESCRIPTIONS — United States, 2011

Healthcare providers prescribed **273.3 million** antibiotic prescriptions—
equivalent to **877 antibiotic prescriptions per 1000 persons.**

Table 1. *Oral antibiotic prescriptions by age and sex—United States, 2011.*

Characteristic	# antibiotic prescriptions (millions)	Antibiotic prescriptions per 1000 persons, rate
Age group[a]		
<20 years	75.2	908
≥20 years	191.9	838
Sex[a]		
Female	164.2	1,036
Male	106.5	695
Region[a]		
Northeast	49.6	892
Midwest	63.4	944
South	111.4	960
West	48.9	671

[a] Totals may not add to all oral prescriptions (273.3 million) due to missing data.

Table 3. *Oral antibiotic prescribing by provider specialty — United States, 2011.*

Provider specialty	# antibiotic prescriptions (millions)	Antibiotic prescriptions per provider, rate
Primary Care Physicians	134.9	568
Physician Assistants & Nurse Practitioners	38.5	222
Dentistry	23.0	187
Surgical Specialties	20.8	233
Emergency Medicine	14.7	454
Dermatology	8.5	746
Obstetrics/Gynecology	7.2	191
Other	25.7	124
All Providers	273.3	300

Citation: Centers for Disease Control and Prevention. Outpatient antibiotic prescriptions — United States, 2011. Available via the internet: http://www.cdc.gov/getsmart/community/pdfs/annual-reportsummary_2011.pdf

Table 2. *Top oral antibiotic classes and agents prescribed—United States, 2011.*

	# antibiotic prescriptions (millions)	Antibiotic prescriptions per 1000 persons, rate
Antibiotic class		
Penicillins	61.1	196
Macrolides	59.2	190
Cephalosporins	36.6	117
Quinolones	31.6	101
B-lactams, increased activity	22.1	71
Antibiotic agent		
Azithromycin	54.3	174
Amoxicillin	52.9	170
Amoxicillin-clavulanic acid	22.1	71
Ciprofloxacin	21.0	67
Trimethoprim-sulfamethoxazole	20.4	66

Data Sources:

Systemic oral antibiotics were extracted from the IMS Health Xponent database. IMS Health captures >70% of outpatient prescriptions nationally, reconciles them to wholesale deliveries, and projects to 100% coverage. These data represent all outpatient antibiotic prescriptions from community pharmacies and non-governmental mail order pharmacies from all payers, but exclude federal facilities. Provider specialties are taken from the American Medical Association (AMA) self-designated practice specialties and categorized into one of 17 groups. Population data were obtained from the U.S. Census bridging files.

References

1. Hicks, L.A., et al., *US Outpatient Antibiotic Prescribing Variation According to Geography, Patient Population, and Provider Specialty in 2011.* Clin Infect Dis, 2015. **60** (9): p. 1308-16.
2. IMS. *The Uniform System of Classification (USC).* [cited 2015 September 22]; Available from: http://www.imshealth.com/deployedfiles/ims/Global/Content/Insights/Health%20Services%20Research%20Network/USC_Classiification_Process_2011.pdf.

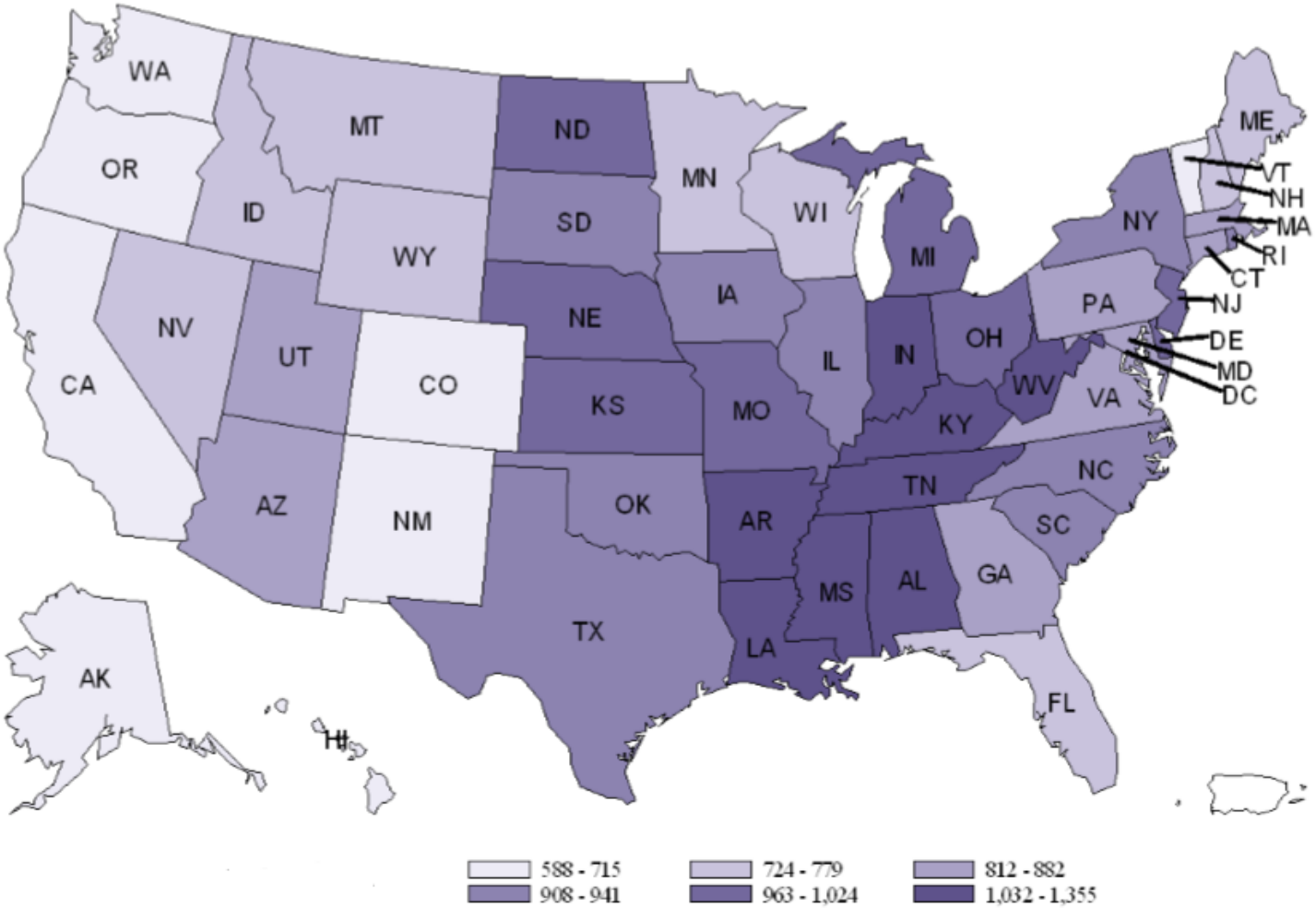

Figure 1. *Antibiotic prescriptions per 1000 persons by state (sextiles) for all ages — United States, 2011.*

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