More Than Half of Antibiotics Prescribed in Advance of Dental Procedures Aren't Needed

Dentists in the West and urban areas write the highest number of scripts for unnecessary antibiotics.

June 4, 2019 By Alicia Green

In the United States, dentists dispense 10% of prescriptions for antibiotics. Now, a new study published in JAMA Network Open suggests that these meds are prescribed needlessly 81% of the time, reports the University of Illinois (UIC) at Chicago College of Dentistry.

Researchers used a national health care claims database to examine nearly 170,000 antibiotics prescriptions individuals received at dental visits between 2011 and 2015. Then scientists compared these prescriptions with the number of high-risk cardiac patients—the only group for whom antibiotics before a dental procedure are recommended according to national guidelines.

Findings showed that 81% of prescriptions did not match up with national guidelines and were given to those without high-risk cardiac conditions. In addition, after checking distribution patterns by geographic location, investigators also noted that unnecessary prescriptions mostly occurred in the West and urban areas. (Patients with prosthetic joint implants and those who received the drug clindamycin—an antibiotic used to treat a wide variety of bacterial infections—were more likely to fill unnecessary prescriptions.)

"These results point to trends by geography that are unexpected—they are the opposite of what is seen in medical clinics—and to an alarming tendency of dental providers to select clindamycin, which is associated with a higher risk of developing C. difficile infections when compared to some other antibiotics," said Katie J. Suda, PharmD, MS, an associate professor of pharmacy systems, outcomes and policy at UIC's College of Pharmacy and the lead researcher of the study.

Susan Rowan, DDS, the executive associate dean and associate dean for clinical affairs at UIC's College of Dentistry, who worked with Suda on the inquiry, suggested that dentists should regard these findings—the first to look at preventive antibiotic prescribing for dental procedures—as a chance to recommit to the careful management of antibiotic usage in their practices.

She concluded that the information should be regarded as "a powerful call to action, not a

rebuke.”

For related coverage, read “Could Bacteriophages Be an Alternative to Antibiotics?” and Are Kids With Asthma Being Prescribed Unnecessary Antibiotics?”

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.realhealthmag.com/article/half-antibiotics-prescribed-advance-dental-procedures-needed