

No significant change in overall antibiotic use among hospitalized patients

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While overall rates of antibiotic use in U.S. hospitals appeared unchanged from 2006 to 2012, there were increases in the use of some antibiotics, especially broad spectrum ones, according to a new report published online by *JAMA Internal Medicine*.

Ensuring appropriate antibiotic use in the United States is a national priority because of the threat of antibiotic resistance and other consequences when [antibiotics](#) are unnecessarily used.

James Baggs, Ph.D., of the U.S. Centers for Disease Control and Prevention, Atlanta, and coauthors used proprietary administrative data to estimate inpatient use of antibiotics in the United States. Data came from the Truven Health MarketScan Hospital Drug Database, which included about 300 hospitals and more than 34 million discharges.

From 2006 through 2012, 55.1 percent of patients received at least one dose of antibiotics during a hospital stay; the overall national days of therapy were 755 per 1,000 patient-days, according to the report. That was not a significant change in overall use over time, according to the authors.

However, there was a significant increase in the average change over time for the use of third- and fourth-generation cephalosporins, macrolides, glycopeptides, β -lactam/ β -lactamase inhibitor combinations, carbapenems and tetracyclines.

The study notes limitations related to the use of administrative data.

"This trend is worrisome in light of the rising challenge of [antibiotic resistance](#). Our findings can help inform national efforts to improve antibiotic use by suggesting key targets for improvement interventions," the [report](#) concludes.

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