

# Antimicrobial resistance up in *K. pneumoniae* isolates

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*Klebsiella pneumoniae* isolates from U.S. inpatients are becoming increasingly resistant to antimicrobial agents, according to a study published in the January issue of *Emerging Infectious Diseases*.

(HealthDay)—*Klebsiella pneumoniae* (*K. pneumoniae*) isolates from U.S. inpatients are becoming increasingly resistant to antimicrobial agents, according to a study published in the January issue of *Emerging Infectious Diseases*.

Guillermo V. Sanchez, M.D., of the George Washington University in Washington, D.C., and colleagues used data from The Surveillance Network to examine trends in antimicrobial-resistant *K. pneumoniae* among U.S. inpatients from 1998 to 2010.

Data on antimicrobial susceptibility were available for 3,132,354 specimens collected from blood, sputum, urine, and wounds. The

researchers found that imipenem resistance was first noted in 2004, and increased gradually to 4.3 percent by 2010. During the study period, changes in *K. pneumoniae* [antimicrobial resistance](#) varied, ranging from large increases for aztreonam (7.7 to 22.2 percent), ceftazidime (5.5 to 17.2 percent), and [ciprofloxacin](#) (5.5 to 16.8 percent), and smaller increases for tetracycline (14.2 to 16.7 percent) and amikacin (0.7 to 4.5 percent). In 2010, for all antimicrobial agents except tetracycline, higher levels of drug resistance were found in isolates from the [lower respiratory tract](#) versus urine. Isolates of *K. pneumoniae* resistant to imipenem exhibited the least resistance to tetracycline (19.9 percent) and amikacin (36.8 percent), and a high prevalence of cross resistance was found for ciprofloxacin (96.4 percent).

"Our study shows that *K. pneumoniae* antimicrobial drug resistance increased for every antimicrobial class studied except tetracyclines," the authors write. "This emerging problem presents a major threat to public health and warrants due diligence in future surveillance efforts."

**More information:** [Full Text](#)

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