# Antibiotic resistance of bacterial strains isolated from patients with community-acquired urinary tract infections: an exploratory study in Palestine.

[Abu-Taha AS](http://www.ncbi.nlm.nih.gov/pubmed/?term=Abu-Taha%20AS%5BAuthor%5D&cauthor=true&cauthor_uid=22082328)1, [Sweileh WM](http://www.ncbi.nlm.nih.gov/pubmed/?term=Sweileh%20WM%5BAuthor%5D&cauthor=true&cauthor_uid=22082328).

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### Abstract

#### BACKGROUND AND OBJECTIVES:

No studies about resistance of bacteria isolated from patients with community-acquired urinary tract infections (CA-UTI) or local guidelines for antibiotic use in these infections have been published or established in the West Bank, Palestine. The objectives of this study were to determine the (1) type and frequency of isolated bacteria and (2) their resistance to commonly used antibiotics.

#### METHODS:

A cross sectional study on community urinary isolates was carried out in Nablus, Palestine between November 2009 and April 2010. A convenience sampling method was used for collection of specimens.

#### RESULTS:

A total of 375 specimens were collected from 306 (81.6%) females and 69 (18.4%) males. Three hundred and thirty nine (90.4%) of isolated uropathogens were Gram-negative bacteria, of which 243 (71.7%) were Escherichia coli. Thirty six (9.6 %) of the total isolates were Gram-positive bacteria, of which 21 (58.3%) were Staphylococcus saprophyticus. High resistance rates were recorded for E. coli against trimethoprim/sulfamethoxazole (37%), nitrofurantoin (29%), ampicillin (65%), and nalidixic acid (37%). E. coli showed low resistance to amoxicillin/clavulanic acid, ciprofloxacin, cefotaxime and ceftriaxone with rates of 12.2, 17.2, 11.1, and 11.1% respectively.

#### CONCLUSION:

E. coli was the most frequent bacterium in the studied sample and showed high resistance to first-line antibiotics. Our results highlight the need for developing local guidelines where elevated resistance to antibiotics should influence prescribing decisions.