Antibiotic susceptibility testing of *Escherichia coli* and coliform isolates detected in samples of drinking water from central Greece

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E. coli: A 18.6%, **B1 26.4%**, B2 17.3%, D 4.1%, E 0.9%, F 3.6%, Clades I/II 5.5%, Clades III/IV/V 3.2%, and 20.5% unclassified Coliforms: *Citrobacter* 40.6%, *Enterobacter* 18.8%, *Klebsiella* 37.0%, and *Serratia* 3.6%

Distribution of 2450 drinking water samples

Antibiotic susceptibility testing with reference to EUCAST classification criteria (V. 14.0)

Microbiological analysis and biochemical confirmation according to ISO 9308-1:2014 Phylogroup (*E. coli*) analysis and genus (coliforms) assignment (Clermont *et al.*, 2013, 2019; Bej *et al.*, 1990)

> AMR/MDR classification (Magiorakos *et al.*, 2012)

All the *E. coli* isolates were susceptible to CN and MEM All the coliform isolates were susceptible to FEP, CIP, CN, IMP, MEM, and SXT

Antibiotic resistance of E. coli isolates per phylogroup

358 isolates (220 E.coli

and **138** other coliforms)



Antibiotic resistance of *E. coli* and coliform isolates per phylogroup and genus, respectively *AM: ampicillin; AMC: amoxicillin/clavulanic acid; CAZ: ceftazidime; CFM: cefixime; CFR: cefadroxil; CTX: cefotaxime; CXM: cefuroxime; FEP: cefepime; FOX: cefoxitin; CIP: ciprofloxacin; CN: gentamicin; IMP: imipenem; MEM: meropenem; SXT: trimethoprim/sulfamethoxazole; TE: tetracycline*



The highest resistance rates among both *E.coli* and coliform isolates were against **ampicillin**

Most AMR and/or MDR isolates of *E. coli* or coliforms exhibited resistance against **ampicillin** and **amoxicillin/clavulanic acid**