

ANTIMICROBIAL SUSCEPTIBILITY OF *ESCHERICHIA COLI* ISOLATED FROM HUMANS AND ANIMALS

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Summary. Antimicrobial susceptibility of *Escherichia coli* isolated from humans, cattle, pigs and poultry was investigated by a micro-dilution test. Epidemiological cut-off values and clinical breakpoints were determined in the course of investigations. One hundred and thirty seven isolates from cattle, pigs and poultry and 38 isolates from humans were obtained in different Lithuania regions and tested. Results showed that resistance was common to different classes of antimicrobials in both sectors. Clinical resistance of *E. coli* to ampicillin was the most common (97 % in human isolates and 47 % in animal isolates). Resistance to trimethoprim-sulfamethoxazole (45 % in humans and 18 % in animals) and ciprofloxacin (32% in humans and 12% in animals) was also common. Human isolates showed to be more frequent clinically resistant to all classes of tested antimicrobials, however the highest number of animal isolates had epidemiological resistance to fluoroquinolones. According to the obtained results may be outlined that equal attention must be taken in humans and animals with the aim to control of spreading resistant *E. coli* strains.

Keywords: *E. coli*, antimicrobial resistance, MIC, antibiotics.